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# CONTENTS.

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**A LECTURE** on the Value of the Clinical Polygraph in Certain Cardiac Disorders. Delivered before the St. Thomas's Hospital Medical and Physical Society, by BASIL PARSONS-SMITH, M.D. Lond., late House Physician, St. Thomas's Hospital.—(*Illustrated*) ..... 1599

**ORIGINAL ARTICLES.**

On a Change Occurring in the Pelvis in a Case of Prepuberal Atrophy of the Testicles. By H. BATTY SHAW, M.D.Lond., F.R.C.P. Lond., Physician to University College Hospital and to the Brompton Hospital for Consumption and Diseases of the Chest; and R. HIGHAM COOPER, L.S.A., Medical Officer in Charge of Electro-therapeutic and X Ray Departments, University College Hospital, &c.—(*Illustrated*) ..... 1606

Treatment of Yaws by Intramuscular Injections of Salvarsan. A Report on a Series of 45 Cases Treated at the Yaws Hospital, St. George's, Grenada, B.W.I. By R. P. COCKIN, M.A., M.D., B.C. Cantab., Resident Surgeon, Colony and Yaws Hospitals, and Bacteriologist, Grenada ..... 1609

Chronic Polyserositis (Multiple Serositis) Simulating Intrathoracic Growth. By REGINALD G. HANS, M.R.C.S. Eng., L.R.C.P. Lond. ..... 1610

Some Causes of Disappointment following Removal of Tonsils and Adenoids. By WILLIAM WILSON, M.D., B.Sc. Manch., Assistant Surgeon, St. John's Bar Hospital, Manchester.—(*Illustrated*) ..... 1612

A Note on Perforation of Gastric Ulcers into the Heart Itself, with Report and Photograph of a Case. By FRANK E. TYLECOTE, M.D.Vict., D.P.H., M.R.C.P. Lond., Senior Physician to the Salford Royal Hospital; Visiting Physician to the South Manchester Union Hospitals ..... 1613

Martial and Medicine. By RAYMOND H. P. CRAWFURD, M.A., M.D.Oxon., F.R.C.P. Lond., Physician to King's College Hospital, &c. ..... 1643

**MEDICAL SOCIETIES.**

ROYAL SOCIETY OF MEDICINE: SECTION OF MEDICINE:—Non-cancerous Tumours of the Stomach.—Calcareous Deposit on a Fish Bone in the Parotid Duct.—Combined Sclerosis of the Spinal Cord with (?) Dystrophia Adiposogenitalis... 1615

SECTION OF ELECTRO-THERAPEUTICS:—Technique and Standardisation of Bismuth Meals ..... 1615

SUBSECTION OF ORTHOPÆDICS:—Presidential Address ..... 1616

MEDICAL SOCIETY OF LONDON: Exhibition of Clinical Cases 1617

LIVERPOOL MEDICAL INSTITUTION: "Lane Kink."—Appendix Abscess.—Influences of the Venereal Diseases ..... 1618

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND: Electrolytic Chlorine Bleach for Asylum Laundries.—Asylum Dysentery ..... 1618

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY: Myeloid Sarcoma ..... 1619

SCOTTISH OTOLOGICAL AND LARYNGOLOGICAL SOCIETY: Exhibition of Cases, &c. ..... 1619

ROYAL ACADEMY OF MEDICINE IN IRELAND: Three Fatal Cases of Pharyngitis ..... 1620

NORTH OF ENGLAND OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY: The Serum Diagnosis of Pregnancy ..... 1621

BRISTOL MEDICO-CHIRURGICAL SOCIETY: Exhibition of Specimens, &c. 1621

**REVIEWS AND NOTICES OF BOOKS.**

Irritability: a Physiological Analysis of the General Effect of Stimuli in Living Substance. By Max Verworn, M.D., Ph.D. ..... 1621

Asthma and its Radical Treatment. By James Adam, M.A., M.D.Glasg., &c. ..... 1622

Müller's Serodiagnostic Methods. Authorised translation from the Third German edition by Ross C. Whitman, B.A., M.D. ..... 1623

Massage, Manual Treatment, Remedial Movements, History, Mode of Application, and Effects. By Douglas Graham, M.D. Fourth edition ..... 1623

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Handbuch der Pathogenen Mikro-organismen. Herausgegeben von Dr. W. Kolle und Dr. A. von Wassermann 1624

Guide to the Microscopic Examination of the Eye. By Professor R. Greeff ..... 1625

Pathologisch-anatomisches Praktikum für Studierende und Aerzte. By Richard Oestreich ..... 1625

Obstetrics for Nurses. By Joseph B. de Lee. Fourth edition ..... 1625

Biochemie des Wachstums des Menschen und der Höhern Tiere. Von Dr. Phil. et Med. Hans Aron ..... 1625

Miscellaneous Volumes ..... 1625

Journals and Magazines ..... 1626

**NEW INVENTIONS.**

Apparatus for the Production of Artificial Pneumothorax.—(*Illustrated*) ..... 1627

**THE GENERAL MEDICAL COUNCIL.**

Penal Cases ..... 1627

Apothecaries' Hall, Dublin ..... 1630

An Erasure from the Medical Register ..... 1632

Medical Men and the Signing of Notifications ..... 1632

National Health Insurance Act Committee ..... 1633

**LEADING ARTICLES.**

THE NATIONAL INSURANCE ACT: THE NEW DRAFT REGULATIONS ..... 1634

THE UNIVERSITY OF LONDON: THE ORGANISATION OF ADVANCED MEDICAL STUDIES... 1635

**ANNOTATIONS.**

A British Radium Standard ..... 1638

The Multiple Uses of Sugar ..... 1638

A Hospital and a Graveyard ..... 1638

The Society of Tropical Medicine and Hygiene ..... 1639

Abdominal Pain after Vaccination ..... 1639

Tuberculosis Notification ..... 1639

The Sale of Cocaine Snuff ..... 1640

Malaria and Agriculture ..... 1640

The Mount Vernon Hospital Controversy ..... 1640

Dental Caries as a Contagious Disease ..... 1641

The Radcliffe Infirmary, Oxford ..... 1641

Street Ambulances for London 1642

Rupture of the Symphysis Pubis in Labour ..... 1642

The Frequency of Amentia as Related to Sex ..... 1642

The Battle of the Clubs in Germany ..... 1643

VITAL STATISTICS:

Health of English Towns ... 1648

Health of Scotch Towns ..... 1648

Health of Irish Towns ..... 1648

**SPECIAL ARTICLES.**

Royal Commission on Venereal Diseases ..... 1648

The Services: The Shortage in the Medical Branch of the Royal Navy.—The Volunteer Reserve of the Royal Navy... 1649

Medical Practice under the Insurance Act. XXIX.—The Working of the Act in Devonshire: Resistance in Exeter.—(*To be continued*)... 1652

**HOME AND FOREIGN NOTES.**

(FROM OUR OWN CORRESPONDENTS.)

Scotland ..... 1654

Ireland ..... 1654

Paris ..... 1655

Vienna ..... 1656

**OBITUARY.**

Edwin Klebs, late Professor of Pathology at Würzburg, Prague, and Zürich ..... 1657

Clement Godson, M.D.Aberd., M.R.C.P. Lond., M.R.C.S. Eng., Consulting Physician to the City of London Lying-in-Hospital ..... 1658

**CORRESPONDENCE.**

The University of London (Dr. E. Graham Little).... 1658

The Pathology of Yellow Fever (Dr. J. E. L. Johnston)..... 1660

The Government of the Royal College of Surgeons of England (Dr. Sidney C. Lawrence, Mr. Frederick W. Collingwood) ..... 1661

The National Insurance Act: The Signing of Certificates (Mr. C. H. Pring) ..... 1662

The Mount Vernon Hospital (Dr. F. W. Tunnicliffe and Dr. A. J. Whiting) ..... 1662

Big Game and Sleeping Sickness versus Man and his Animals (Mr. Sheffield Neave) 1664

Vinegar and Orange Juice as Possible Causes of Hæmorrhage in Women (Dr. Bernard Myers) ..... 1665

Range of Flight of Musca Domestica (Mr. Paul B. Roth) 1666

The Diagnosis and Treatment of Syphilis ..... 1673

**THE NATIONAL INSURANCE ACT.**

Clause 2 (ii.) of the New Draft Agreement ..... 1666

Extravagant Use of Drug Funds ..... 1666

A Conference of Non-Panel Practitioners ..... 1667

Mr. Lloyd George and the Unallotted Funds ..... 1668

Death of an Unallotted Patient without Medical Aid ..... 1668

Rubber Stamps and the Signing of Certificates: A Test Case ..... 1668

The Death of Dr. Horace Dimock ..... 1668

The Lambeth Insurance Practitioners' Association ..... 1668

The Shoreditch Medical Union 1669

**MEDICAL NEWS.**

Royal Sanitary Institute ..... 1668

Presentation to a Veteran Medical Man ..... 1610

The Health of Birmingham ..... 1614

Royal United Hospital, Bath... 1637

King Edward VII. Memorial, Birmingham ..... 1643

London School of Clinical Medicine (Post-Graduate).... 1651

The After-care Association ..... 1668

University of Cambridge ..... 1669

Foreign University Intelligence ..... 1669

Presentations to Medical Men 1668

Lister Memorial Fund ..... 1670

Society of Apothecaries: Dinner to the Lord Mayor of London ..... 1670

The late Mr. Edward Nettleship's Bequests ..... 1670

Glasgow University Club ..... 1670

Weston-super-Mare Hospital... 1671

Wiltshire County Asylum, Devizes ..... 1671

A Cornish Centenarian ..... 1671

Bristol Medical School Dinner 1671

Books, &c., received ..... 1671

Appointments ..... 1671

Vacancies ..... 1672

Births, Marriages, and Deaths 1673

Notes, Short Comments, and Answers to Correspondents 1673

Medical Diary ..... 1674

Acknowledgment of Communications received ..... 1676

FOR INDEX TO ADVERTISEMENTS SEE PAGES 2 & 4.

# INDEX

## MEDICAL AND OTHER BOOKS AND PUBLICATIONS


PAGE

**ARNOLD:—**
Bolton .... Ulcer of the Stomach 9
Cammidge.. Glycosuria, &c. ..... 9
Collie, Sir J. Malingering ..... 9
Diseases of Children ..... 9
Hutchison.. Diseases of Children. 9
Macleod .. Diabetes ..... 9
Saundby .. Old Age ..... 9
Savill ..... Clinical Medicine.... 9
Stewart .... Nervous Diseases .... 9
Text-Book of General Pathology .. 9
Vincent .... Internal Secretion & Ductless Glands... 9

**BAILLIERE, TINDALL & COX:—**
Bigg ..... Indigestion ..... 10
Bayly ..... Clinical Pathology of Syphilis .... Cover 1
Freyer .... Enlargement of the Prostate ..... 10
" ..... Urinary Organs ..... 10
Gardner .. Surgical Anæsthesia Cover 1
Mummery .. Sigmoidoscope Cover 1
Sommerville Public Health Cover 1
The Pocket Anatomy ..... Cover
Thorne .... Nauheim Treatment of Diseases of the Heart..... Cover 1

**BALE, SONS & DANIELSSON:—**
Adamson .. Modern Views upon Skin Eruptions .... 10
Moullin .... Inflammation of the Appendix.... Cover 1

**CASSELL & CO:—**
Morris, Sir M..... Diseases of the Skin.. 10

**CHURCHILL, J. & A.:—**
Crippe .... Cancer of the Rectum 11
" .... Diseases of Rectum.. 11
Dominici & Warden .. Radium-Therapy in Malignant Disease Cover 1
Fenwick .. Cancer and Tumours Cover 1
" .. Ulcer and its Consequences .. Cover 1

PAGE

**CHURCHILL—(Continued).**
Goodhart, Sir J. F., & Still.... Diseases of Children 6
Hare ..... Alcoholism.... Cover 1
Horwood .. Plant Life ..... 6
System of Treatment ..... 6
Taylor .... Digestion, &c. ..... 6
Thresh .... The Examination of Waters, &c. ..... 6
Turner & Stewart .. Nervous Diseases .... 6
White ..... Materia Medica, &c.. 6
Whitaker.. Surface Anatomy .... 6
Who's Who in Science, 1914..... 6
Wiley ..... Foods and Adulteration ..... 6

**FROWDE AND HODDER & STOUGHTON:—**
Adamson .. Skin Affections of Childhood ..... 10
McCann .. Cancer of the Womb, &c. ..... Cover 1

**GLAISHER:—**
Herschell .. Indigestion .. Cover 1

**GRIFFIN & CO.:—**
Davies .... Hygiene ..... 10
Mann ..... Physiology & Pathology of the Urine .. 10
Riddell .... Manual of Ambulance 10

**HUMPHRY MILFORD:—**
Portraits of Dr. William Harvey Cover 1

**LEWIS:—**
Bennett .... Materia Medica and Pharmacy ..... 3
Bruce ..... Lectures on Tuberculosis to Nurses .... 3
Bruce ..... A System of Radiography ..... 3
Fenwick .. Disorders of Digestion, &c. .... Cover 1
" .. Dyspepsia of Phthisis Cover 1
Gould ..... Practitioner's Medical Dictionary ..... 3
" ..... Student's Medical Dictionary ..... 3
" ..... Pocket Medical Dictionary ..... 3

PAGE

**LEWIS—(Continued).**
Gould & Pyle ..... Pocket Cyclopedia of Medicine ..... 3
Harris .... Medical Electricity .. 3
Lockwood .. Diseases of Stomach 3
Moullin .... Enlargement of the Prostate .... Cover 1
" .... Tumours ..... " 1
Murray .... Rough Notes on Remedies ..... 3
Murrell .... What to Do in Cases of Poisoning ..... 3
Rawling .... Landmarks, &c., of the Human Body .. 3
Smith ..... Common Remedies .. 3
Tilley ..... Diseases of the Nose, &c. ..... Cover 1

**LONGMANS, GREEN & CO.:—**
Abney, Sir W. de W.. Colour Vision ..... 8
Ashby ..... Notes on Physiology.. 8
Cheyne, Sir W., & Burghard. Surgical Treatment.. 8
Colyer ..... Dental Surgery, &c... 8
Gray ..... Anatomy ..... 8
Grünbaum.. Morbid Histology .... 8
Halliburton Chemical Physiology. 8
Hare ..... Food Factor in Disease ..... Cover 1
Lickley .... Nervous System..... 8
Plimmer .. Practical Physiological Chemistry .... 8
Quain's Dictionary of Medicine .. 8
Schäfer, Sir E. A... Histology ..... 8
White, &c.. Alimentary Toxæmia 10

**MACMILLAN & CO.:—**
Adami & McCrae .. Pathology ..... 7
Ballance .. Cerebral Decompression in Ordinary Practice ..... 11
Cook, Sir E. The Life of Florence Nightingale ..... 7
King ..... Feeding and Care of Baby ..... 7
Luciani .... Human Physiology .. 7
Milligan & Wingrave. Diseases of the Ear.. 7

PAGE

**MACMILLAN—(Continued).**
New System of Medicine ..... 7
Paton ..... Metabolism ..... 7
Rolleston .. Diseases of the Liver, &c. ..... 7

**MEDICAL PUBLISHING CO.:—**
Lane, Sir W. A.. Operative Treatment of Fractures ..... 10
" Cleft Palate and Hare Lip ..... 10

**NISBET & CO.:—**
Lane, Sir W. A.. Treatment of Chronic Constipation ..... 1

**SAUNDERS COMPANY:—**
Bryan ..... Principles of Surgery 5
Crandon & Ehrenfried Surgical After-Treatment ..... 5
Eisendrath . Surgical Diagnosis .. 5
Mayo Clinic Papers 1912 ..... 5
Murphy's Surgical Clinics ..... 5
Up-to-date Books for the Surgeon Cover 1

**WRIGHT & SONS (BRISTOL):—**
Mummery .. Diseases of the Colon Cover 1

**MEDICAL LIBRARIES, &c.:—**
Behnke—
Stammering ..... 11
Bellaey—
Stammering ..... 11
Matthews Bros.—
Wood: Application of Trusses 11
Scholl Mfg. Co., Ltd.—
Scientific Correction for Ailments of the Feet..... 19
Waterston & Sons—
The Doctor's Daily Register .. 10


## OFFICIAL AND GENERAL ANNOUNCEMENTS


**APPOINTMENTS VACANT:—**
Argyle and Bute Asylum, Lochgilphead ..... 87
Ashton-under-Lyne Union ..... 84
Brentford Union Infirmary, &c.. 85
Brighton Throat and Ear Hosp.. 85
Bristol Royal Infirmary..... 83
Camberwell Infirmary ..... 86
Cambridgeshire County Council .. 82
Cancer Hosp. (Free), Fulham-road 83
Cancer Hosp. Research Institute.. 83
Charing Cross Hospital..... 86
Chester General Infirmary ..... 84
City of Nottingham Education Committee ..... 84
Corporation of Birmingham City Hospital ..... 84
Corporation of Manchester..... 85
Corporation of Manchester—Monsall Fever Hospital ..... 85
County Asylum, Chester ..... 86
County Asylum, Lancaster ..... 86
County Asylum, Rainhill..... 86
County of Dumfries and Burghs .. 87
Coventry and Warwickshire Hosp. 83
Croydon General Hospital ..... 85
Darenth Industrial Colony, Dartford ..... 86
Dundee Maternity Hospital ..... 87
East Sussex Hospital, Hastings 85, 86
Essex County Hosp., Colchester .. 85
Gateshead Asylum ..... 86
Glasgow District Mental Hospital, Gartloch ..... 87
Govan District Asylum, Crookston 87
Great Yarmouth Hospital ..... 84
Hamlet of Mile End Old Town .... 83
Harrogate Infirmary ..... 87
Hospital for Sick Children, Great Ormond-street ..... 82
Hospital for Women, Soho-square. 84
Hull and Sculcoates Dispensary .. 87
India Office ..... 83
Joint Counties Asylum, Carmarthen ..... 84
Kent County Asylum, Maidstone .. 82
Kent and Canterbury Hospital, Canterbury ..... 85
King Edward VII. Hospital for Windsor, Eton, and District .... 86
King Edward VII.'s Hos., Cardiff. 82
Lancashire County Asylum, Winwick ..... 87
Leavesden Asylum, King's Langley 87
Leeds General Infirmary ..... 84
Leeds Infectious Diseases Hosp.. 83
Leeds Public Dispensary ..... 85

**APPOINTMENTS—(Continued).**
Lewes Victoria Hospital ..... 87
Liverpool Stanley Hospital..... 85
Lowestoft Hospital ..... 86
Macclesfield General Infirmary .. 85
Manchester Hosp. for Consumption, &c. ..... 84
Manchester Royal Infirmary ..... 85
Miller General Hospital for South-East London..... 86
National Hosp. for the Paralysed and Epileptic ..... 83
Newcastle-upon-Tyne City Asylum, Gosforth ..... 83
Northampton General Hospital .. 83
Nottingham General Dispensary.. 83
Oxford County Asylum, Littlemore 82
Parish of St. Marylebone ..... 86
Perth District Asylum ..... 87
Royal Albert Edward Infirmary and Dispensary, Wigan ..... 84
Royal Devon and Exeter Hospital 84
Royal Eye Hospital, Southwark .. 83
Royal Free Hos., Gray's Inn-road. 83
Royal Halifax Infirmary ..... 84
Royal Hosp. for Diseases of Chest. 83
Royal Hospital, Richmond, Surrey 85
Royal Infirmary, Hull..... 83
Royal Naval Medical Service..... 85
Royal Portsmouth Hospital ..... 85
Royal Sussex County Hospital, Brighton ..... 86
St. Bartholomew's Hos., Rochester 84
St. George-in-the-East Dispensary, Shadwell ..... 87
St. Mary's Hospital for Women and Children, Plaistow..... 82
Shefield Royal Hospital ..... 86
Shrewsbury Dispensary..... 86
Somerset & Bath Asylum, Cotford. 82
Southampton Free Eye Hospital.. 82
South Devon and East Cornwall Hospital, Plymouth..... 84
Trinity College, Glenalmond .... 87
Walsall and District Hospital .... 86
Warwick County Asylum ..... 85
West African Medical Staff..... 83
Western Ophthalmic Hospital .... 84
West Ham Union ..... 84
West Riding Asylum, Wakefield .. 85
Worcester General Infirmary..... 85

**ASSISTANCIES, MEDICAL:—**
Arnold & Sons, Giltspur-street.... 87
150, Dashwood House, New Broad-street ..... 83
Lee & Martin, Birmingham..... 87
Miss X., Westbourne-terrace ..... 88

**ASSISTANCIES—(Continued).**
No. 678, L.O., Strand ..... 87
No. 681, L.O., Strand ..... 88
No. 682, L.O., Strand ..... 87
No. 683, L.O., Strand ..... 87
No. 686, L.O., Strand ..... 87
Phillips-Jones, Penrhiwceiber .... 87
Scholastic, Clerical, &c., Association, Craven-street ..... 87
Stevenson, Manchester ..... 87
Turner ..... 88

**ASYLUMS, HOMES, &c.:—**
Ashwood House, Kingswinford .. 74
Association of Medical Men Receiving Resident Patients ..... 81
Barnsley Hall, Bromsgrove ..... 74
Barnwood House Hospital ..... 75
Bishopstone House, Bedford..... 74
Bootham Park, York ..... 74
Broadlands, Medstead ..... 81
Brunton House, Lancaster ..... 81
Buntingford House Retreat, Buntingford ..... 77
Camberwell House, Peckham-road 76
Cheadle Royal..... 75
City of London Mental Hospital, Stone..... 81
Clarence Lodge, Clapham-park .. 74
Colthurst House, Alderley Edge .. 74
Coppice, The, Nottingham ..... 75
Dairympie House, Rickmansworth 77
Dartmoor Sanatorium ..... 76
David Lewis Colony, Alderley Edge 74
Duff House, Banff..... 76
Ghyllwoods ..... 77
Grove House, Church Stretton.... 75
Grove, The, Catton, Norwich.... 75
Haslemere Nursing Home ..... 81
Haydock Lodge, Newton-le-Willows ..... 76
Haynes, Brentwood..... 81
Heigham Hall, Norwich ..... 74
Holmesdale, Hastings ..... 81
Home for Epileptics, Maghull .... 74
Invernith Lodge Sanatorium, Colinsburgh ..... 76
Kingsdown House, Box..... 74
London Fever Hospital..... 75
Maison de Santé de Glain-lez-Liége (Belgium) ..... 81
Malling Place, Kent ..... 75
Manna Mead, Blackheath ..... 81
Melbourne House, Leicester ..... 81
Mendip Hills Sanatorium ..... 79
Meyrick, Brighton ..... 81
Middleton Hall, Co. Durham..... 74

**ASYLUMS—(Continued).**
Moat House, Tamworth ..... 75
Mount Pleasant, Wanstead ..... 81
Mount Vernon Hospital for Consumption ..... 78
Mundesley Sanatorium ..... 70
Newmains Retreat, Lanarkshire.. 77
Nordrach-on-Dee, Banchory ..... 78
Northumberland House, Finsbury-park ..... 74
Northwoods House, Winterbourne 76
Norwood Sanatorium, Ltd..... 77
No. 592, L.O., Strand ..... 81
Oses Island, Heybridge..... 77
Peckham House..... 76
Pendyffryn Hall Sanatorium, Nordrach-in-Wales ..... 77
Plympton House, Plympton ..... 75
Portsmouth Corporation Mental Hospital ..... 74
Queen Alexandra Sanatorium, Davos Platz ..... 80
Ringwood & Inge, Hayling Island. 81
Ruebury Sanatorium, Northallerton ..... 81
St. Andrew's Hospital, Dollis Hill 81
St. Andrew's Hosp., Northampton 75
St. Luke's Hos. for Mental Diseases 74
Shaftesbury House, Formby-by-the-Sea..... 76
Springfield House Private Asylum, Bedford ..... 75
Stocker, Craven-street ..... 81
Stretton House, Church Stretton.. 75
The Grange, Rotherham ..... 75
Vale of Clwyd Sanatorium ..... 78
Warneford Asylum, Oxford..... 74
Wye House, Buxton..... 75
Yarrow Convalescent Home, Broadstairs ..... 76

**COMPANIONS:—**
No. 667, L.O., Strand ..... 88

**FINANCIAL, &c.:—**
Equitable Reversionary Interest Society.. ..... 71

**HEALTH RESORTS, BATHS, &c.:—**
Harrogate Hydropathic Establishment ..... 73
Leysin, Switzerland..... 79
Peebles Hotel Hydropathic ..... 73
Pegli ..... 80
Smedley's, Matlock ..... 73

**HOMES WANTED:—**
No. 677, L.O., Strand ..... 81


*For continuation of Index to Official and General Announcements, and Trade and Miscellaneous Advertisements, see page 4.*

# A Lecture
ON
# THE VALUE OF THE CLINICAL POLYGRAPH IN CERTAIN CARDIAC DISORDERS.

*Delivered before the St. Thomas's Hospital Medical and Physical Society*

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MR. PRESIDENT AND GENTLEMEN.—During recent years certain important and far-reaching advances have been achieved in the methods of investigating diseases of the heart, not limited solely to the cases presenting gross and obvious lesions, but including the numerous and interesting derangements of function to which the organ is so essentially prone. These advances result largely from careful instrumental experiments, and embrace not only the observations emanating from the analysis of polygraphic tracings, but also the conclusions arrived at by the electrocardiographic study of the heart beat and the recently introduced method of recording simultaneously the heart beat and heart sounds. There can, in fact, be no doubt that within the last decade the clinical study of heart disease has received a memorable impetus, numerous hitherto unexplained conditions have been identified, classifications have been rendered possible, and as a natural sequence cardiac pathology, profiting by the stimulus, emerges vastly richer in detail and accuracy.

I here bring to notice a series of typical records taken with the clinical polygraph in illustration of the widespread adaptability of the instrument, and proving its real diagnostic worth when used in conjunction with an ordinarily careful physical examination, and this remark applies with equal significance to the valuable aid rendered by the electrocardiogram. As far as possible, the confines of this paper are limited to the province of diagnosis, and deal mainly with such advances as have been achieved by the taking of graphic records, venous and arterial, the former of which have provided a new stimulus to the study of the heart beat from the standpoint of its rhythmicity, conductivity, contractile power, and irritability.

A fact more or less universally agreed upon is that the origin of the beat in the heart of the reptile and the amphibian is in the sinus venosus—viz., that segment of the organ into which the systemic veins flow. The normal contraction of the human heart then, initiated at the sino-auricular node, travels over the auricular tissue to the auriculo-ventricular node, and then on by means of the auriculo-ventricular bundle to the papillary muscles of the ventricles. Now the rate at which the heart contracts—or what comes to the same thing, the rate at which the stimulus material built up at the sino-auricular node explodes—is governed by nervous connexions—viz., the vagus and sympathetic, and it is easy to understand that these can be capable of tonic variation from time to time. We are aware that the vagus nerve, by means of its superior and inferior cardiac branches, exercises through its tonic activity a permanent inhibitory effect on the heart, restraining its actions and allowing of a more perfect metabolism. In addition, however, to this normal inhibitory function we find further possibilities. On stimulation of the vagus—either directly in the neck, indirectly by means of any of its branches, or reflexly by strong stimulation of sensory nerves—there results a marked slowing of the heart, a depressed tonicity of the muscle both auricular and ventricular, and a weakening of the beat, possibly even a cardiac standstill. The sympathetic fibres, proceeding from the second, third, and fourth thoracic spinal nerves, and passing by means of the first thoracic and the inferior cervical ganglia to the cardiac plexus on the aortic arch, contain the augmentor and accelerator fibres, the latter of which are in constant tone in opposition to the permanent inhibitory effect exercised by the vagus.

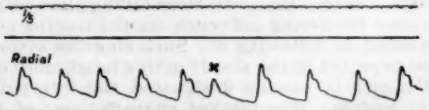
The records illustrating this paper are reproductions from tracings taken with the ink polygraph of Dr. James Mackenzie, which is one of the most convenient mechanical contrivances for securing simultaneous tracings from different points of the circulatory system. It is a conveniently portable and uncomplicated machine, most satisfactory for clinical work, easily manipulated, and one which furnishes us with tracings of any length. The two most usually combined are the standard radial and the jugular pulse, the former being a key to the ventricular excursions, and the latter giving us a valuable insight into those of the auricle.

For the purposes of this paper I have taken four fairly widely recognised cardiac maladies—viz., auricular fibrillation, tachycardia, bradycardia, and premature or extra systoles. I will take the last of these headings first—viz., the extra systole.

### PREMATURE CONTRACTIONS.

There are many patients whose radial pulsations and heart beats continue with complete uniformity for long periods, but in whom an occasional and isolated disturbance is noted, in that a serial beat is missed at intervals; a pause of this character occurs from a variety of causes, such as heart block or sudden vagal stimulation, but the most commonly arising etiological factor is the premature contraction. Sphygmograms and apex tracings from such cases show that the ventricle has contracted before its normal time, and this early contraction is immediately followed by an abnormally long pause. (Fig. 1.) Extra systoles of this

FIG. 1.




Tracing of the radiogram showing the occurrence of a premature contraction, marked ×.

character may be found in patients as quite an isolated phenomenon. On the other hand, they may be so frequent as to take the place of each alternate normal beat, causing the pulse to assume at once an intermittent and bigeminal arrangement, and it is only by means of combined venous and arterial tracings that it is possible to differentiate the bigeminal pulse of such an origin from the equally bigeminal pulse exhibited by patients with heart block in whom every third auricular beat fails to get through to the ventricle, and from the cases in which there is a recurring vagal prolongation of each alternate diastole.

Proceeding further with our investigations on these pathological or premature beats, and comparing them with the normal or physiological, it is at once obvious that there are two fundamental and

striking differences: (1) that the premature beat is the response of the ventricle to an abnormally rapid impulse formation, evidenced by the fact of its early appearance; and (2) that the early pathological impulse shows no definite tendency to recur in any orderly sequence, but on the other hand is most frequently identified at irregular intervals in the sphygmogram.

It becomes essential to have some rough classification of these premature contractions, and we divide them for this purpose into auricular, ventricular, and nodal, meaning by the latter term those extra systoles originating in the strand of tissue uniting the auricle and ventricle; at the same time, it must be clearly understood that this classification is but crude for this reason, the cardiac musculature is extensive, the potential points of impulse formation numerous, but it is to be hoped that before long experimental research may advance our knowledge on this subject and enable us with precision to indicate definitely the exact point of origin of the premature contraction.

At present, therefore, we must be content with the division I have mentioned—namely, auricular, ventricular, and nodal extra systoles, and I shall briefly consider these three forms, taking first the ventricular, which postulates a beat occurring before its expected time. Now we are in possession of two very important facts—viz.: (1) that the ventricle responds to excitation only during diastole; and (2) that the ventricle is refractory during the whole time of systole. These we may consider as fundamentals in our study of the ventricular premature contraction. In response to an abnormally occurring excitation the ventricle contracts—in other words, becomes refractory; and during this misplaced refractory phase the normal auricular stimulus arrives, evoking, as we should expect, no response from the ventricle, which is itself still refractory owing to the extra systole. The pause following the extra systole is therefore prolonged for these reasons: (1) the ventricle has contracted prematurely and independently; (2) a normal ventricular contraction has been missed altogether; and (3) the ventricle is silent until the arrival of the next auricular stimulus.

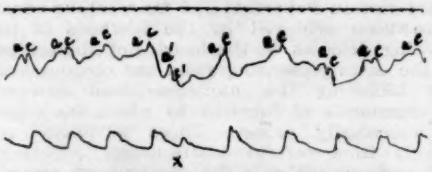
Now, this disturbance is not the invariable accompanist of all ventricular extra systoles. In certain uncommonly occurring tracings we find evidence of an extra ventricular contraction taking place without the least disturbing influence on the tracing either preceding or following it. Such an extra systole is to be expected in the slowly acting heart more especially, and is usually designated the interpolated extra systole. One marked characteristic of such an irregularity is that the *a-c* interval, following the interpolated beat, is prolonged, the junctional tissues having been to a certain extent cheated of their recuperation period.

It is surprising how commonly these ventricular extra systoles are met with, especially in elderly people, patients who in their early years have been the victims of rheumatism, and none the less frequent in pure cardiac disorders such as mitral disease, aortic regurgitation, and dilatation with muscular incompetence.

Passing now to the auricular extra systole (Fig. 2) we find evidence of a premature arterial beat on the radial tracing, and simultaneously with this a premature *c* wave on the phlebogram, but this *c* wave is preceded by an *a* wave, caused by the early and premature contraction of the auricle, the *a-c* interval in this instance, however, being longer than normal. Now this premature *a* wave may appear in different forms; if the heart is acting comparatively slowly it will be observed as an isolated wave resembling for all practical purposes a normal auricular wave. On the other hand, we may find it blending with some other wave in the venous pulse, most commonly the previous *v* wave, giving rise to an abnormally prominent peak on the phlebogram.

In cases exhibiting nodal extra systoles, as we should expect, the auricle and ventricle contract prematurely and together; therefore, on the venous curve we find a prominent peak consisting of a

FIG. 2.



Polygraphic curve from a patient exhibiting a premature contraction auricular in origin.

combined *a* and *c* wave lying over an early beat on the radial tracing. In such cases, of course, the *a-c* interval is *nil*, but premature beats sometimes arise in the junctional tissues as the result of an impulse which does not originate a synchronous contraction of the auricle and ventricle, their dual prematurity being, however, proved by shortened *a-c* interval or even by the presence of a *c-a* interval, the ventricular contraction being somewhat in advance of that of the auricle.

### AURICULAR FIBRILLATION.

Auricular fibrillation is a condition only comparatively recently recognised, but now placed on a firm footing by a host of modern observers. For our purpose a short evolutionary sketch is necessary. Clinicians for many years past have sought an explanation of the gross irregularity of cardiac and arterial tracings obtained from patients with imminent cardiac failure. The type of patient I am referring to is familiar to all, for no medical ward of any large hospital is long without one. He is unable to adopt the recumbent position, he sits propped up with pillows, with an anxious expression on the flushed face, the lips and mucous membranes cyanotic, the breathing laboured and embarrassed. Such is the clinical picture; the pulse is distinctive, rapid and irregular, a motley collection of large and small beats following one another in disordered and arrhythmic series, a mixture of large beats closely followed by runs of small, almost imperceptible, pulsations.

This grossly irregular pulse, which had been the subject of close investigation for many years, has now been satisfactorily explained by the pioneer work of Mackenzie, and the later experiments of Lewis and others. The former noted the absence of any sign of auricular contraction whenever the pulse assumed the characteristic irregularity—in other words, the jugular curve showed no sign of auricular contraction, the *a* wave was completely absent; he therefore ascribed the condition to auricular paralysis. Continuing his observations he was struck by the fact that post mortem the auricular wall from such a case showed marked hypertrophy, which would hardly be so if the auricle had been in a paralysed condition; he thereupon rejected his first hypothesis and expressed his

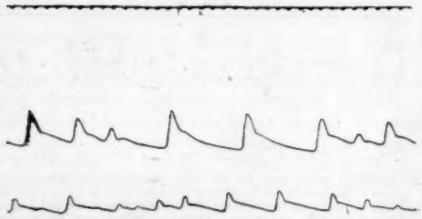
opinion that the auricle contracted simultaneously with the ventricle, so still offering a satisfactory explanation of the absence of the *a* wave in the jugular tracing.

This his second theory postulated the dislocation of the point of impulse formation from the sinus to the upper end or node of the auriculo-ventricular bundle; hence the term "nodal rhythm," which was looked upon as the accepted explanation of the condition until Lewis made a happy comparison between the curves obtained from cases with so-called nodal rhythm and curves obtained from dogs whose auricles were in a fibrillating condition as a result of faradisation. The curves so compared were found to be identical—there was no sign of any auricular contraction in either. The nodal rhythm theory, therefore, was abandoned, and the condition was thereafter named "auricular fibrillation." The evolution of the irregular pulse is therefore briefly summarised in the following phases: (1) auricular paralysis; (2) nodal rhythm; (3) auricular fibrillation.

The appearance of the auricle fibrillating in experiment is quite distinctive. There is no coördinate contraction of the muscular wall, which maintains itself in the condition of diastole, or virtual paralysis and inactivity, but the latter is hardly correct, for close inspection reveals the muscular wall in a state of active turmoil, its surface being broken up in an innumerable series of contracting areas, a hopeless collection of disconnected twitchings with no interrelationship or coördination. Certain of these fibrillations get through in haphazard fashion to the ventricle and give rise, as we should expect, to the irregularity and rapidity of its beat. It is most important thoroughly to grasp the fact that the auricular systole, in the ordinary acceptance of the term, is never accomplished, but at the same time its incessant activity is shown by the flickering undulatory movements, the result of multiple impulse formation, or expressed in another way multiple extra systoles, of which a certain proportion get through to the ventricle.

We are now in a sufficiently illuminated position to appreciate some of the characteristics of the arterial and venous records, taking first the arteriogram. (Fig. 3.) The rate is markedly increased, in

FIG. 3.

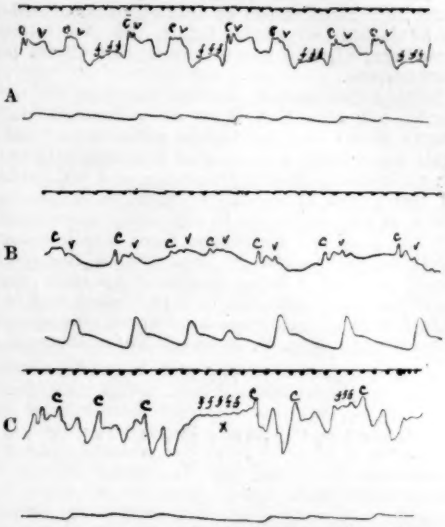


Two radial tracings from typical cases of auricular fibrillation.

but few cases less than 120 beats to the minute, and usually many more are recorded; there is no pretence of regularity either in the rhythm or in the sequential size of the beats, which consist of a varied and confused collection. We notice no fixed relationship between the strength of the beat and the length of the preceding pause, a large beat follows a short pause, and sometimes the longest pauses are succeeded by minute and almost imperceptible beats. I say almost imperceptible, for meeting, as we do, beats of all shapes and sizes, and similarly pauses of varying length, it is not surprising to find that during some of the longest intervals the ventricle has contracted, but insufficiently so to give rise to a radial pulsation—in other words, we find evidence of frequent missed beats or intermissions, and this is, as we should expect, another important characteristic of the pulse in auricular fibrillation.

And now as to the phlebogram, Fig. 4. It is of

FIG. 4.




Simultaneous venous and arterial tracings from three patients with auricular fibrillation. In each the venous pulse is of the ventricular form, the auricular wave is missing, and the main waves occur during ventricular systole. Small oscillations, especially well marked in Tracing C (×), appear in the longest diastolic intervals.

what is called the ventricular form—that is to say, all the waves noticed on the jugular curve are found on measurement to occur during the ventricular systole. There is no definite presystolic wave; the normal *a* wave caused by the auricular contraction is nowhere to be found, but its place is taken by well-marked fibrillation waves, small undulations diastolic in time, which become most noticeable in the comparatively slowly acting heart.

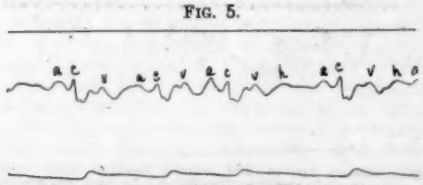
These small fibrillation waves, representing the diastolic excursions of the fibrillating auricle, are obtained mainly from cases with some form of valvular disease, the great majority consisting of those with mitral lesions, especially stenosis. At the same time, however, it is well to remember that auricular fibrillation can develop otherwise than from valvular disorders, being comparatively frequent in the various forms of myocarditis and in those patients the previous subjects of rheumatism, whose heart muscle attacked in youth later on bears witness by symptoms of failure and degeneracy to early stresses. The condition, however originating, is an evidence of muscular incapacity, resulting from actual damage to the muscle fibre, damage so extensive as necessarily to influence the prognosis, for the paralysed auricle loads an already defective muscle with an extra and appreciable burden. It is invariably a grave symptom, and usually is found to herald cardiac failure, temporary or terminal, so that very few patients survive its onset for more than ten years, and we may take this as absolutely the outside limit.

*Slow Pulse or Bradycardia.*

The conception of bradycardia assumes a retardation of the frequency of the heart beat; cases in which there is only one palpable pulse beat to each two cardiac systoles can hardly be regarded as true bradycardia, so that to be exact bradycardia signifies a slow heart beat and necessarily with it a slow pulse. In searching for the causation of a slow heart beat with the object of making a working classification of this common disorder, it is advisable to consider briefly the two following headings: (1) The heart muscle, and (2) its nerve innervation.

Taking the second of these headings, the neurogenic, our attention is at once focused on the vagus nerve and its central connexions; we are well aware that a slowing of the ventricle ensues on excitation of the vagusc entre and on irritation of the nerve at any point from its origin to its intracardiac endings. Bradycardia occasioned by excitation of the centre may have manifold causes, such as hyperæmia or ischæmia of the nucleus itself, the latter being produced by such morbid conditions as meningitis with exudation and by the raised intracranial presence accompanying a cerebral hæmorrhage (Fig. 5), in which latter instance the

FIG. 5.

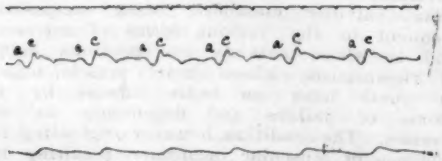


Polygraphic tracing from a patient taken 12 hours after a cerebral hæmorrhage; the slow pulsus cephalicus is well marked.

slow pulsus cephalicus is a well-known cardinal symptom. The retarded pulse under consideration may result from direct or indirect action on the vagus centre—the former produced by a rapid medullary ischæmia, produced by an obstruction, such as atheroma in the basilar artery; the latter from slowly growing cerebral tumours or an insidious meningitis, &c. The cases of bradycardia from irritation of the vagus nerve trunk and its branches are numerous: tumours in the neck and thorax, neoplasm of the œsophagus, goitre, enlarged glands, aneurysm; and reflexly malignant growths of the stomach, gall-stones, and other more remote abdominal disorders.

There remains the more important group of bradycardias, those due to affections of the heart

FIG. 6.



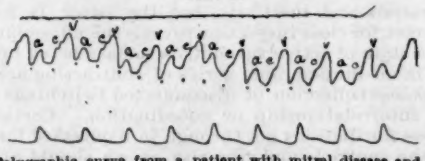
Combined tracing from a patient with intense jaundice of long standing; the pulse-rate was 50; the jugular curve is normal.

muscle. In itself an automatically acting muscle, it is but a natural consequence that this rhythmic action should be depressed, such depression being caused by fatigue, toxæmias, poisons, and the autotoxæmic conditions of jaundice (Fig. 6), anæmia, &c. Closely associated with this depression are the weakened contractility and pulse slowing frequently observed in patients with chronic myocarditis and fatty degeneration of the myocardium.

The most interesting of the slow pulses I have, however, purposely left until last for a more minute investigation—I refer to the cases in which there is a diminished conduction from block at the auriculo-ventricular junction. This diminished conduction causes a delay in, or absence of, response of the ventricle to auricular impulses—in other words, the normal interval may be increased or there may be intermission in the ventricular beat, and these are the two essentials of heart block, either an increase in the A.S.-V.S. interval, normally 1-5th sec., or missed ventricular beats.

The sphygmogram alone from cases of heart block is usually of little value, but combined with a jugular tracing highly instructive. In it we note the following points: 1. A lengthened A.S.-V.S. interval in the early stages. Every auricular stimulus reaches the ventricle, the pulse rhythm is normal, regular, and unaffected, and but for the jugular record we should be in total ignorance of the presence of heart block (Fig. 7). 2. Isolated irregu-

FIG. 7.



Polygraphic curve from a patient with mitral disease and early heart block; the a-c interval is markedly prolonged 1/3rd second as opposed to the normal 1/5th second. Time marker 1/5th second.

larly happening auricular contractions which have never reached the ventricle. 3. A slow progression from this irregular disturbance to a more rhythmic condition in which simple ratios are established between the respective rates of the auricle and ventricle, such as two of the auricle to one of the ventricle, a 2-1 heart block so called, &c. 4. A progressive increase in the A.S.-V.S. interval up to the dropped beat. 5. A further grade in which no auricular impulses are transmitted, called complete heart block (Fig. 8), as opposed to partial

FIG. 8.

Polygraphic curve from a case with complete heart block; the pulse is uniformly slow, 35 beats to the minute; the phlebogram shows numerous auricular waves which are not transmitted to the ventricle. These *a* waves are uniformly spaced on the tracing in most instances isolated, but at times coinciding with a *c* or a *v* wave, in which cases prominent peaks are produced.

heart block, in which an auricular contraction is found to precede each ventricular systole. Such complete heart block is characterised by two entirely separate rhythms, the auricle beating regularly at a normal pace, somewhere about 72 to the minute, the ventricle beating at its own or idio-ventricular rate—viz., 30; in other words, no stimulus arriving from the auricle, contraction material is built up locally in the ventricle and explodes roughly 30 times per minute. 6. Prominent peaks in the jugular tracing when auricular

and ventricular systole takes place together, and there is in consequence a damming back of the auricular contents.

These, then, are some of the characteristics of heart block as ascertained by means of the polygraph, and no less important are the auscultatory phenomena such as the following. During the long pauses caused by the absence of ventricular systole, when we naturally hear no ordinary heart sounds, either first or second, there is still a soft, irregular, and muffled murmur appreciable at the base of the heart in the second and third spaces. This murmur is caused by the auricular systole, and is especially well marked in cases of mitral stenosis; such a combination as that of mitral obstruction and 2–1 heart block will produce a very characteristic picture; there will be two thrills and two apical presystolic murmurs to every one ventricular systole.

In a paper dealing with a case of heart block, published in 1899 by His in the German Archives of Clinical Medicine, we find mention of this soft, irregular murmur at the base of the heart, and synchronous with it evident undulatory pulsations in the cervical veins,—these both in periods of ventricular silence, demonstrating the auricular activity and the presence of blockage between the upper and lower chambers.

Prior to His's observations came the papers by Adams and Stokes, the former published in 1827 in the Dublin Hospital Reports, the latter in 1846 in the *Dublin Quarterly Journal of Medical Science*. Adams's case is of historical interest, as it was the first recorded case[1] presenting symptoms of bradycardia associated with syncopal attacks, the pulse never being more than 30 and periodically becoming slower and almost imperceptible, at which times apoplectic attacks were invariable. Stokes some few years later published his first case, which presented symptoms of repeated apoplectic attacks not followed by paralysis, combined with a slow pulse and a note to the effect that the number of pulsations in the jugular vein was more than double the number of the manifest ventricular contractions. The combination of a slow pulse with syncopal attacks, known as the Adams-Stokes syndrome, was fully explained by His as being due to a pathological condition in the junctional tissues causing a block in the onward transmission of the auricular contraction.

It is a matter of importance to remember that Adams-Stokes disease, as we recognise it to-day, involves necessarily the two conditions bradycardia and syncopal attacks, the latter being caused by the deficient cerebral circulation during the periods of asystole, which periods are necessarily of varying duration. An asystole of 3–7 seconds causes a transient fainting attack, but if prolonged to double this time—viz., 15 seconds or thereabouts—in addition cyanosis, pallor, and convulsions make their appearance. At first sight it would seem that these convulsions were only due to the asystole resulting from the heart block, but this is not so.

Post-mortem examinations furnish us with additional evidence in the shape of atheroma of the coronaries and the arteries at the base of the brain. The former can obviously so starve the heart muscle as to cause periods of asystole and a resulting cerebral anæmia with convulsions. The latter—namely, disease in the cerebral blood-vessels—is quite capable of causing ischæmia of the vital centres, so much so that the vagus centre is strongly irritated and inhibits the heart action, giving rise to a complete vicious circle, the irritation of the vagus centre inhibiting the cardiac conductivity, slowing the pulse, and still further depleting the aorta and its branches and therefore causing further ischæmia of the medulla. The Adams-Stokes syndrome is therefore not an entity, so varied are the post-mortem findings—coronary atheroma, cerebral arterial disease, embolism or thrombosis of the coronary arteries, and the large and varied collection of pathological lesions found in the auriculo-ventricular bundle, such as fatty degeneration, fibrosis, rheumatic inflammation, gumma, calcification, diphtheritic degeneration, &c.

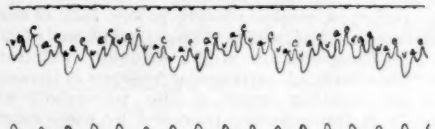
[1] With regard to priority in respect of observations upon bradycardia see letters in THE LANCET, Nov. 1st (p. 1289) and 8th (p. 1357), 1913.—ED. L.

### TACHYCARDIAS.

In tachycardia we find a considerable increase in the number of heart beats, together with a correspondingly increased pulse frequency. Under normal circumstances the adult heart beats at a rate varying from 65–80 per minute, and for all practical purposes this rate may be taken as the fundamental basis, a diminution being designated bradycardia and an increase tachycardia, always remembering the rapid pulse of the infant and the slow cardiac action of the aged. We are perfectly familiar, also, with the increased rate of heart beat during the digestion period, after bodily exertion and mental overwork; this is as normal an occurrence as is the rapid physiological tachycardia during pregnancy, parturition, and lactation.

I cannot bring to your notice a more every-day example of tachycardia than that accompanying the febrile state. (Fig. 9.) Broadly

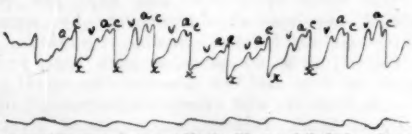
FIG. 9.



Polygraphic curve from a patient with febrile tachycardia; all the normal waves appear on the jugular tracing.

speaking, a rise in temperature is the hand-in-hand associate of a rise in pulse-rate, and this rise in pulse-rate depends on the coexisting causes and conditions, such as the nature and virulence of the infection and its toxins, and, furthermore, the quantity of poison present in the circulation, the individual reaction of the patient, and the condition of the heart and blood-vessels.

FIG. 10.



Polygraphic curve from a patient with exophthalmic goitre; the radial pulse is rapid, 140; the usual waves appear on the jugular tracing.

There still remains for consideration those forms of symptomatic tachycardia without any suggestion of fever, and foremost in this group we place atropine poisoning, which causes pulse acceleration owing to its well-known paralysing effect on the vagus terminals; exophthalmic goitre (Fig. 10), also

alcoholism, causing the essential degenerative lesions of heart and blood-vessels, over-indulgence in tea and coffee, excessive digitalis medication, and the transitory tachycardia following amyl nitrite and nitroglycerine due in a great measure to the vasodilation so produced. In like manner as the vagus terminals are paralysed by atropine, so may the central connexions of this great inhibiting nerve be affected by pressure resulting from hydrocephalus, tumours of the medulla and cerebellum, and in the late stages of meningitis, following in the latter case the characteristic early bradycardia, which is due to central irritation; not to be overlooked are also such other affections of the nervous system as Landry's paralysis, anterior poliomyelitis, disseminated sclerosis, and acute myelitis should they attack the vagus nucleus.

In contradistinction to symptomatic tachycardia the group described as paroxysmal tachycardia exhibits an enormous frequency of heart-beats, 200 and even 300 per minute. The fundamental characteristics of this condition include, in addition to the excessive tachycardia, a distinct lowering of blood pressure and the peculiarity that the paroxysms commence absolutely suddenly and end in an equally abrupt fashion. Such attacks vary in duration and intensity in each patient, from the isolated paroxysms of short duration in the early stages to the more severe attacks later on, which may last days, weeks, and even months. The abrupt onset and termination must be distinctly emphasised—they are cardinal signs in the diagnosis, and invariably observed.

Most common in men and frequently following in the wake of rheumatic fever, the cases so far investigated have been, as a rule, free from valvular lesions, but cardiac disability is evidenced by the diminution in cardiac reserve power, lack of normal response to effort, and perhaps signs of early failure, as breathlessness on slight exertion, palpitation, &c. This lack of myocardial reserve is invariably the precipitating agent of the paroxysm, which usually is immediately preceded by some exertion or some disturbing emotion. The paroxysms may last practically any length of time, and most usual are those whose duration is reckoned in hours.

The abrupt onset is signalled by a sense of discomfort in the left side of the chest, a sudden severe attack of palpitation, accompanied by dizziness and general weakness, often cardiac pain, or a feeling of flatulent indigestion, faintness, sweating, and frequent vomiting—the pain, however, not usually approaching that of angina, though in certain recorded cases it has been very severe, violent, and continuous, and with the characteristic radiations of the more severe disorder. The patients complain of constriction of the chest, inability to breathe, or a band of tightness. Such are the early symptoms, and they are closely followed, as we should expect, by signs of embarrassment in the cardiac functions. The heart working, so to speak, at such high pressure begins to flag, and we observe the usual consequences, cyanosis and venous engorgement, dropsy, increased heart dulness, an enlarged liver and spleen, albuminuria, and congestive bronchitis, all resulting directly from the mechanical disability of heart. Such attacks may progress to a fatal termination, but the majority are suddenly relieved, the heart action becoming normal in rate, and all the signs of failure clearing up in a remarkably short time. The heart resumes its normal size, as do also the liver and spleen, and the equilibrium of the circulation, both pulmonary and systemic, is restored.

Bearing in mind the fact that the pulse at the wrist and that at the apex are not always identical, it becomes more than ever important if we are to get at the true rate to count the beats at the apex and not from the wrist. Imagine for a moment that we find a patient whose illness has started abruptly, perhaps following an over-exertion, or by a reflex action from the stomach and intestines by the ingestion of sour or gas-forming food, or from the brain through psychic excitement, fright, &c., with giddiness, epigastric pain, palpitation, but no respiratory distress, no pulmonary râles, and pallor rather than cyanosis, and a heart-rate of 160–200 per minute or over, and this rapid rate with a regular pulse beat. Our first conclusion is that we are in the presence of a new rhythm rather than an accelerated normal rhythm; and the differentiation between a new rhythm and an accelerated normal rhythm is further advanced by the simple test of the reaction of the heart-rate to posture, the general rule being that the symptomatic tachycardia decreases in rate or even disappears with the assumption of the supine position. Not so, however, with the cases under consideration, paroxysmal tachycardias, in which is postulated a new and extraneous rhythm, maintained under a variety of circumstances, with no regard for posture, and uninfluenced by swallowing or the suspension of respiration. Such tachycardias cannot be caused by paralysis of the vagus, for in the latter condition the accelerated pulse is permanent and never exceeds 150 beats per minute; nor can they be explained by an irritation of the sympathetic, which if existing would cause a gradual rise in rate at the commencement, and an equally gradual slowing at the termination of attack. An acute primary dilatation of the heart has been suggested by some clinicians as the causative factor in the malady. but this seems hardly sufficient, for it is difficult to imagine that a dilatation can be abruptly effected and equally suddenly disappear, apart from the fact that such a dilatation is not observed either by X rays or even suggested by percussion.

The paroxysmal tachycardias are divided into three main groups: (1) the auricular; (2) the ventricular; and (3) the nodal or junctional. And of these groups it is well to consider the most common first—viz., the auricular tachycardias—before investigating the exceedingly rare ventricular.

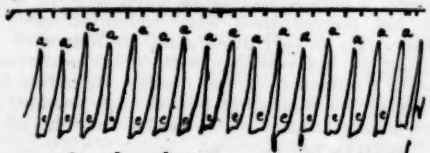
As we should expect, graphic records are highly illuminating in the differentiation and accurate diagnosis of such cases, and of no less importance are those taken during the slow period than those obtained at the actual times of the paroxysms, for this reason: the malady is one of an insidious and slowly developing character, years possibly passing before it assumes its unmistakable features—in other words, there is a well-marked prodromal stage or period of invasion, during the early part of which we find the appearance of an occasional pulse irregularity. A tracing obtained about this time proves the irregularity to be of the nature of an extra systole or premature contraction of some one of the previously mentioned varieties. As time goes on the patient complains of the cardiac irregularity becoming more troublesome, the extra systoles are more frequently cropping up and with less provocation than heretofore; at times they appear

alternating with each normal beat, or with each second normal beat, and sooner or later we find a short sequence or run of these extra systoles interfering with the normal rhythm. We have now reached Stage II.—viz., the extra systole in short series; and a confident opinion may be given that we are passing over the border-line separating the extra systole, in itself a comparatively unimportant phenomenon, and the more serious condition that we are now discussing—viz., paroxysmal tachycardia, or Stage III. in the series. Having traced the series from the singly occurring extra systole, through its various phases, up to the onset of Stage III., it will be obvious to all that paroxysmal tachycardia is but the expression of a heart in which at times beats arise ectopically and give rise to the occurrence of multiple premature beats in series.

A short description of the curves obtained from a typical case of paroxysmal tachycardia of the auricular variety embraces the following points of interest. Taking first the arteriogram, we notice an unduly rapid pulse tracing, the beats of which are regularly occurring and of constant magnitude, the paroxysm itself being usually ushered in by an extra systole and concluding with a long pause. It is noteworthy that the extra systoles of the slow periods may be of a totally different variety from that introducing the paroxysm—for instance, typical ventricular extra systoles have been described and demonstrated interfering with the normal rhythm of the slow-pulse periods in a patient the subject of auricular tachycardia whose paroxysms began with the normal auricular extra systole. The main point, however, to remember is that the paroxysm is introduced by an extra systole.

Turning now to the jugular tracing (Fig. 11), we find, as a rule, a succession of prominent *a* waves preceding the *c* waves by the normal *a*-*c* interval. These *a* waves are high and prominent for two possible reasons—first, the fact that owing to the rapidity the auricular beat falls back and becomes coincident with the previously occurring ventricular systole, the wave being indeed a compound one, combining the normal *a* and *v* waves;

FIG. 11.



Typical polygraphic curve from a patient with auricular tachycardia; the prominent *a* wave precedes the *c* wave by the normal interval. (Lewis: Heart, 1909, vol. i., p. 48.)

secondly, the possible instrumental error, the sudden and extensive venous movement causing the tambour and pen in some slight measure to overshoot the mark. In consequence of the auricular contraction taking place coincidently with the previous ventricular and the auricular wave falling back the venous pulse assumes the ventricular form during the paroxysms—i.e., all the waves are systolic in time, and the diastolic interval is practically *nil*.

Shortly summarised, the venous pulse passes from the normal by an extra systole which originates a series or sequence of extra systoles, which sequence may vary in duration from minutes to days, finally ceasing suddenly and continuing after a pause the normal rhythm. But there is one stage further, and one whose explanation is not far to seek—viz., auricular fibrillation, in the development of which a rhythm already arising in an ectopic focus gives place to one in which there are multiple ectopic foci originating impulses which descend in haphazard fashion to the ventricle, the usual state of affairs in auricular fibrillation.

Our knowledge of the ventricular tachycardias is of a somewhat more fragmentary and uncertain quantity, mainly consisting of the results accruing to the work done by Dr. T. Lewis, of University College Hospital.

Apart from the paroxysms, the rhythm of the auricle is presided over, so to speak, by the impulses descending from the sino-auricular node, which impart to the auricles, and through them to the heart as a whole, the rhythmic stimuli for the normal cardiac contraction; or differently expressed, the auricular is the dominant rhythm at all normal times; then comes a typical paroxysm, and with it a new rhythm—viz., the ventricular, so that for the time being there are two dominant rhythms originating, the one in the upper and the other in the lower chamber. Now the mechanism of the cardiac contraction is to a certain extent adaptive, but it will not stand too gross an interference. Obviously two different rhythms in action simultaneously are not likely to conduce to an absolutely satisfactory result; one of two things must happen—either the two opposing rhythms continue or one gives way, and this latter alternative is the one most usually followed, the auricular

FIG. 12.

A polygraphic curve obtained when ventricular tachycardia was present, the pace being set by the ventricle, the auricle responding to the retrograde stimulation. (Lewis: Heart, 1910, vol. ii., p. 141.)

rhythm becoming, so to speak, submerged in that of the ventricle. So that what we may expect to find in examining curves obtained from hearts subjected to ventricular tachycardia (Fig. 12) is that the auricle is no longer responding to the normal impulses from the sinus; its contraction is now dependent on impulses from the lower chamber—in other words, we have a reversal in the order of things, the ventricle responding to its ectopic impulses, initiates the cardiac contraction, and the auricle follows suit, its systole being governed by the retrograde stimulation, upwardly transmitted from the ventricle.

To take the tracing more in detail we find that the paroxysm is initiated as usual by the extra systole and the auricular rhythm is at once interfered with; after a few beats, however, the auricle has become educated and is responding to each ventricular contraction; the *a* wave follows the *c* wave in an exactly similar manner to that in which the *c* wave normally follows the *a*. And so the curve continues, *a* following *c*, until the end of the paroxysm, where we notice the long pause occurring which prefaces the return to the normal rhythm.

Retrogression is, however, not the invariable rule, for the auricle may continue to beat in

normal fashion throughout the paroxysm, especially if it be one of short duration, and under these conditions the *a* waves may be identified, regularly spaced and at their proper intervals, not only on the venous curves but also on the electrocardiographic records, where the typical base negative duration is exposed with extreme lucidity.

The one remaining type of paroxysmal tachycardias is that in which the impulse originates somewhere in the neighbourhood of the auriculo-ventricular junctional tissues. An impulse of this nature will reach the upper and lower chambers approximately at the same moment and give rise to a simultaneous contraction of the auricle and ventricle, which causes a prominent *a-c* wave on the jugular tracing. Briefly enumerated, the chief characteristics of the jugular tracing in such a case of nodal tachycardia are: (1) irregularly occurring atrio-ventricular extra systoles prefacing (2) a period of tachycardia, in which we notice either (*a*) single prominent waves the combination of *a* and *c*, bearing witness to the simultaneous contracting of auricle and ventricle, or (*b*) a series of waves in which the *a* precedes the *c* as normally, but by a much reduced *a-c* interval, and which concludes (3) with a characteristic long pause.

## ON A CHANGE OCCURRING IN THE PELVIS IN A CASE OF PREPUBERAL ATROPHY OF THE TESTICLES.[1]

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THE patient, aged 24 years, came under the observation of Dr. W. Egmont Kirby for slight cough and debility. Amongst other symptoms of which he complains are obscure pains in the left abdomen associated with constipation, alternating with the passage of loose offensive stools containing "slime." He is of late years becoming irritable in temper. He is susceptible to cold weather and wears two or three undergarments of wool, and in the recent mild weather generally wears a heavy ulster. His appetite is not good; frequently he misses meals; he is troubled with flatulent distension of the stomach and has nausea occasionally. Though frequently drowsy in the day his sleep at night is prevented by palpitation. He passes urine during the night two or three times, which is partly explained by an inordinate thirst. Other than palpitation and dyspnœa on making much muscular effort he has no cardiac symptom. His former tendency to faint has now passed off. He is sensitive about appearing in public, as his appearance, he says, attracts attention. He is tall and slightly built and, as he says, "his juvenile face and his height" seem to be the reason why people make remarks about him. As long as he can remember his limbs, especially the legs, have been long. He says that at seven years of age he was taken to the West London Hospital for an injury to his leg, and that it was then noticed that his testicles were misplaced, and massage and manipulation were ordered to make them reach the scrotum. At 17 years of age his testicles were present and still out of place. He was advised to press them down into the scrotum and to wear a truss to dislocate them downwards into the normal position. His general condition at this time was such as to lead his local medical man to advise a consultation. Ever since the age of 17 the organs have still further diminished in size, and now he says that the left one has disappeared and only by stretching the skin can the vestige of the right one be demonstrated. There have never been nocturnal emissions; he has no sexual desire; occasionally there used to be erections, but there have been none for a long time.

His father is alive and of good height; his mother also is alive, but is of small stature. One brother, who was 6 ft. 6 in. high, died from pulmonary tuberculosis. Another brother, who is of good height, is healthy and has two children; a sister died from an unknown cause. He had some form of dysentery when in South Africa a year ago. In early years he had erysipelas and whooping cough and does not remember having had mumps. He was breast-fed as an infant.

He is a tall subject and stoops a little, but there is no lordosis of the lumbar spine; his height is 6 ft. 3 in. and weight 7 st. 8½ lb. His face is boyish in appearance, and he presents no signs of hair on the face. His voice is high-pitched, his head is mesaticephalic, having a breadth index of 80, the maximum length of the head (from glabella to occipital point) being 7¾ in. and the maximum breadth measured above the supramastoid ridges 6¼ in. Radiographic examination of the head shows no enlargement of the sella turcica. Although the pomum Adami can be felt it is ill-developed. The skin generally is very soft, the hair of the scalp is abundant, and fine hair is present on the forearms. There is no axillary or pubic hair. The length of the body from the suprasternal notch to the top of the symphysis pubis is 22 in., from the top of the symphysis pubis to the ground 42 in.—the corresponding measurements of a normal man of the same age being 22 in. and 33⅜ in. respectively. He is physically active, but the musculature is slender. The development of the trunk is poor, more especially of the chest. The fingers and toes are long and tapering and the nails filbert-shaped. A photograph taken when a child shows that his fingers then were much shorter and blunter. He is very intelligent, reading hard and working at his vocation with great enthusiasm, often to the neglect of his meals. He is free from all symptoms indicating intracranial tension, and there is no alteration of the fields of vision and the fundi oculorum are normal.

The external measurements of the pelvis are given, followed by those of another normal subject of about the same age for comparison: Interspinous, 9 in. (control 9 in.); intercristal, 10¾ in. (11½ in.); external conjugate, 7 in. (7½ in.); between posterior superior spines, 4 in. (4 in.); between tuber ischii, 3¼ in. (4 in.).

The thyroid gland is defined with difficulty. In August of this year he had a cough, but the expectoration revealed no tubercle bacilli and the lungs and heart revealed no abnormality. The chest is badly shaped, and there is evidence of rickets at the costo-chondral junctions. The tongue is slightly furred, the gums somewhat spongy, and the teeth a little carious, some artificial. The urine shows no sugar or albumin. There is nothing abnormal in the abdomen.

*Genital system.*—In recumbency the symphysis

[1] Being a paper read before the Section of Medicine of the Royal Society of Medicine on Nov. 25th, 1913.

pubis appears to be more prominent than usual. The penis is smaller than normal, and the testicles are absent from the scrotum, which also is small. On stretching the skin in the neighbourhood of the right pubic spine a small ill-defined mass can be defined which on pressure causes pain; the left testicle cannot be found at all.

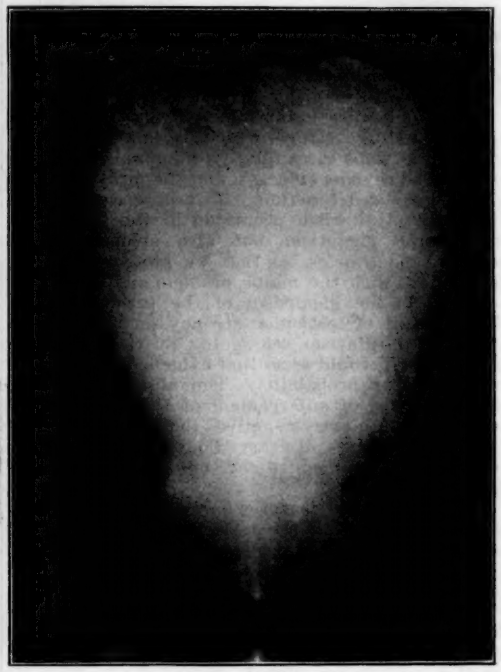
*The skeletal system.*—There is some tendency to stoop, due to an exaggerated curvature of the dorsal spine. This is not accompanied by lordosis; indeed, the lumbar part of the spine is inclined to share in the arc of curvature seen in the dorsal region. X ray examination shows that the bones generally are less dense than normal, and there is delay in development. For example, the following epiphyses are not only not fused but show no sign of commencing fusion, being still separated from their diaphyses by a wide interval of cartilage in which no calcification is visible: Humerus, internal condyle, which should be completely fused between 17 and 18 years; radius (head), which should be completely fused between 18 and 20 years; lower epiphysis, which should be completely fused between 18 and 20 years; ulna, lower epiphysis, which should be completely fused between 20 and 25 years; bases of phalanges, which should be completely fused between 18 and 20 years; heads of metacarpal bones, which should be completely fused at 20 years.

The brim of the pelvis shows definite bulging inwards in the neighbourhood of the acetabula, suggesting an early stage of the triradiate pelvis. The contour of the inlet is cordiform. There is a wide separation of the pubic bones at the symphysis. The relation of the transverse to the antero-posterior diameter of the inlet of the pelvis is as 57 to 67 in the radiogram. (See figure.)

Beyond the general appearance of want of lime in the bones there are no other marked departures from the normal. There is, however, marked loss of density of the anterior part of the bodies of the dorsal vertebræ at the point of the greatest spinal curvature. There is no abnormality in either of the sacro-iliac synchondroses.

*Comment.*—The interest connected with this case, apart from the singular clinical features of the malady, is twofold. The major one involves a matter of principle and is connected with the problem of gigantism. Is the long-limbedness due directly to disturbance of the internal secretion of the testicle, or is it an indirect result and primarily dependent upon secondary changes produced in the pituitary body by the disturbed function of the testicles? In other words, Is gigantism a function of disturbance of the pituitary body only? The second question, of less but still of great importance, is what is the cause of the unusual shape of the brim of the pelvis?

With regard to the first problem the features connected with castration in men and the production of eunuchism are clearly defined; our case shows many of the features described. Castration of men after puberty, beyond functional disability, causes no morphological change in the individual, because, although internal secretion from the testicles is no longer possible, the influence is carried out by para- or extra-testicular tissues which after puberty are endowed with the power of performing the part previously performed by the testicle alone. If castration is carried out before puberty is established, then removal of the testicles means removal of the tissue which alone is capable of developing and maintaining the secondary sex characters. The result is that a sort of, but not a real, infantilism appears—e.g., the facial characters are infantilic, but the true infantilic features of a small skeleton and relatively short limbs are not developed. The vesiculæ seminales atrophy and the prostate, if already developed, retrogresses, or if not yet developed fails to develop. The penis does not usually shrink and, as in this case, is capable of being erected, hence the "haremic" rule amongst some Eastern people of amputating this organ as well as removing the testicles. The pelvis does not assume feminine characters, but rather infantile ones, nor is the psychical change feminine, the eunuch as a rule being restful and placid. In other words, hetero-sexualism is not a feature of the eunuch. Gigantism develops, as is shown by the long-limbedness (or "Hochbeinigkeit"),



From a skiagraph of the pelvis, taken with plate in front, showing the abnormal shape of the pelvic brim—transverse contraction with bulging inwards in the neighbourhood of the acetabula.

and is immediately due to the persistence to a late date of separate epiphyses and the maintenance of a cartilaginous character of the epiphyseal line. In the case of the female, if the ovaries are removed before puberty, the breasts fail to develop owing to the absence of internal secretion from the ovaries, development of the breasts being quite distinct from functioning of the breast, which is now known to depend upon biochemical stimuli derived from the fœtus.

Castration of the male before puberty results in the absence of development of secondary sex-characters; the hair of the body is spare—no hair develops about the anus, and pubic and axillary hair if present are scanty. The face is beardless, but if castration is rather late there may be a marked development of the beard. The configuration of the

thyroid cartilage does not become feminine, but remains child-like and no pomum Adami develops. Ossification does not take place in any part of the thyroid cartilage; the voice is a child's soprano, not a woman's. Not all eunuchs are fat, some indeed are very thin, as in the present case, though possible tuberculosis must be borne in mind. It is known that in animal castration only 50 per cent. of them develop abnormal fat. The "genital" adiposity when it occurs in eunuchs assumes the features of the fat development of women. Castration causes a reduction of oxidation of the tissues, but unlike the metabolic change following removal of the ovaries reduced oxidation cannot be remedied in the male by extracts of the ablated organ. The architecture of the bones is profoundly altered by castration, so that they appear under X rays to be less dense. The skull is altered in shape and becomes dolichocephalic owing to an increase of the relative maximum length. The trunk shares in no way in the increase in length shown by the limbs. Senility ultimately becomes a marked feature.

Another feature noticeable amongst eunuchs is the interesting change which is noted in other glands. In some cases the thyroid gland is reduced in size, the thymus enlarges, and the pituitary body shows increased function. It is now well known that hyperpituitarism occurring in the young not only causes gigantism, but also atrophy of the testicles and ovaries, so that we are now brought face to face with the major problem above referred to—viz., Is the gigantism of the present case a direct result of testicular atrophy, or is it due to the hyperpituitarism set agoing by the testicular atrophy? It would seem that evidence is in favour of the latter probability. The absence of head symptoms and of enlargement of the sella turcica in our case in no way negatives the view, for hyperfunction of the pituitary body is in no way necessarily accompanied by enlargement of the hypophysis.

A perusal of the features met with after experimental ablation of the testicles in animals and of the description given of spontaneous atrophy of the testicles in men of the eunuchoid state shows that they are so parallel with those met with in eunuchs, that we do not hesitate to say that the features of our case are really due to the testicular atrophy, and the patient may be classed as eunuchoid or as a spontaneous eunuch.

At the same time it must be admitted that if hyperpituitarism can exist without the presence of a tumour formation in the hypophysis cerebri, the above diagnosis may be wrong, seeing that a feature of primary hyperpituitarism is testicular atrophy, for this secondary testicular atrophy may quite well produce those features of a eunuch which hitherto have been and still are regarded as essential features of dysgenitalism. This very difficulty seems to remind us of the fact now being so fully admitted that several diseases at one time considered to be of uniglandular origin—e.g., Graves's disease—are, on the contrary, in reality complexes due to pluriglandular disorder.

The second question which now remains to be settled is, What is the cause of the unusual shape of the brim of the pelvis? The radiograms show that it is narrower in the transverse diameter than it is in the antero-posterior one, and that there is a bulging inwards of the brim in the neighbourhood of the acetabula. It has already been stated that there are signs of old rickets as shown by the beading of the ribs, and it is possible that the brim of the pelvis owes its shape to this disorder. So far as we can ascertain, the pelvic brim in rickets does not assume the appearance met with in our case. We have already pointed out that observations show that in eunuchs the pelvic change is one of infantilism, but in no infant or fœtal pelvis we have examined has the configuration above described been met with.

There remain but two further possibilities which, taken in conjunction, appear to give a reasonable explanation of the abnormality. For this explanation we are indebted to Dr. Douglas E. Derry, who has paid so much attention to the anatomy of the pelvis. He has shown us a pelvis of a negro whose height must have been over 6 ft.; this pelvis reveals an inlet which recalls very closely the shape of the inlet met with in our case, in so far as the antero-posterior diameter is greater than the transverse. The same configuration is met with in the apes, so that it is possible that the pelvis in our case is really an example of reversion to a lower type. As Dr. Derry explains, the spine of the negro, unlike the European man's, shows a curvature with the convexity backwards, and the lumbar spine shares in this curvature, being less inclined to be straight or even to be convex forwards, as in the European. The result is that in the negro and apes the pelvis is less inclined to the horizontal, and consequently the weight of the body is less likely to compress the pelvis and less likely to make it assume a flattened contour so far as the brim is concerned. We have seen that in our case the dorsal curvature is increased, but is not compensated for by the development of lordosis, with the result that the same want of compression of the pelvis is met with as in the negro and the apes.

There remains one feature, however, that is not met with in the negro pelvis nor in that of the apes and yet is present in our case, and that is the inward bending of the brim of the pelvis in the neighbourhood of the acetabula. We were inclined to think that this was due to a softening of the pelvic bones akin to osteomalacia, which yielded to the pressure transmitted by the heads of the femora. Dr. Derry's explanation is a much more likely one, and it is that the acetabular regions, which are the meeting points of three bones—the ilium, ischium, and pubic bones—have shared in the delay in union which is so marked a feature in the case of the epiphyses in other parts of our patient's skeletal system, and is so well recognised as a feature in prepuberal destruction of the testicles. This want of solidification in and about the acetabulum has led to the bone in these regions yielding to the increased thrust by the heads of the femora. So far as we know at present this abnormality has not hitherto been described in the pelvis of eunuchs.

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ROYAL SANITARY INSTITUTE.—A sessional meeting of the institute will be held at 90, Buckingham Palace-road on Dec. 9th, at 7.30 P.M., when the Progress of School Hygiene will be considered. A discussion on the report on the Fourth International Congress on School Hygiene at Buffalo will be opened by Dr. James Kerr, medical research officer, London County Council, and the following are announced also to speak: Professor A. Bostock Hill, Mrs. K. Marion Hunter Vaughan, L.S.A., D.P.H., Professor H. R. Kenwood, Mr. C. W. Kimmins, D.Sc., Chief Inspector (Education), London County Council; Dr. Eric Pritchard, Mr. J. Osborne Smith, F.R.I.B.A., and Miss Turner, Assistant Inspector (Education), London County Council.

# TREATMENT OF YAWS BY INTRA-MUSCULAR INJECTIONS OF SALVARSAN.

## A REPORT ON A SERIES OF 45 CASES TREATED AT THE YAWS HOSPITAL, ST. GEORGE'S, GRENADA, B.W.I.

BY R. P. COCKIN, M.A., M.D., B.C. CANTAB.,
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THE following series of 45 cases of yaws treated with intramuscular injections of salvarsan is of interest as displaying the value of the intramuscular method of injection, and at the same time the radical change effected by the introduction of this drug as a mode of treatment for one of the most intractable of tropical diseases.

Since when this series was under treatment the injection of salvarsan was looked upon as an experimental form of treatment, it was not possible, for financial reasons, to treat with the drug all the suitable cases one met. Its use consequently was reserved for those cases in which the disease was unusually severe, of long duration, or recurrent, and of such cases the present series is composed. The series represents 12·5 per cent. of the total number of cases admitted to the Yaws Hospital, St. George's, Grenada, during the year, and includes patients of ages ranging from 4 to 35 years.

The method of preparing the salvarsan for injection was in all the cases a slight modification of that suggested by Taege, and is as follows. The salvarsan was received from the ampoule containing it into a sterilised and dry test-tube, and there emulsified by the addition of 10–12 minims of pure glycerine. Sufficient hot, chemically pure, sodium chloride solution (0·5 per cent.) was added to make the bulk up to 10 c.c. and get the salvarsan into solution. The solution was then received into a sterilised all-glass syringe and so injected. The syringe and needle were for each injection sterilised by boiling, and the skin at the site of injection was painted with a 10 per cent. solution of tincture of iodine.

The point chosen for injection was in all cases that at the junction of the middle and upper thirds of a line drawn from the tuber ischii to the anterior superior iliac spine. After injection the puncture was at once sealed with collodion. The patients were kept in their beds for three days subsequent to the injection, and a four-hourly record of the temperature was made during this period and until the end of the week. A milk diet was given for two days following the injection, after which a full or half diet was allowed.

The usual history was a rise of temperature within the first 24 hours—rarely exceeding 101° F.—together with complaints of pain and "a feeling of tension" at the site of the injection, but both these symptoms generally passed away within two or three days, and no patient in the series remained in bed after the third day. No complications due to the toxicity of the drug were recorded, and no abscess occurred in any case.

Case 27 is of interest as being that of a youth who had previously been injected with salvarsan, 0·3 grm., suspended in olive oil. On that occasion the patient was discharged 69 days after injection. The difference in the time of recovery on the present occasion is no doubt due partly to the larger dose administered and partly to the difference in the rate of absorption caused by the different methods in which the salvarsan was prepared for injection.

Case 42 is also a case of relapse after injection. In this case I believe that the dose administered on the first occasion was insufficient. The age given for this child by the parents was 11 years, but his appearance, owing to his ill-nourished and emaciated condition, was that of a child of five years of age. This rendered the administration of a larger dose than was given on the second occasion inadvisable.

*A Series of 45 Cases of Yaws treated with Intramuscular Injections of Salvarsan in 1912.*

| No. | Age. | Sex. | Recurrent or first attack. | Dose. | Date of injection. | Date of discharge. | No. of days. |
|---|---|---|---|---|---|---|---|
| 1 | 15 | F. | First attack. | 0·4 grm. | April 15th | May 14th | 29 |
| 2 | 4 | ,, | ,, | 0·2 ,, | ,, | June 19th | 65 |
| 3 | 11 | M. | ,, | 0·3 ,, | ,, | ,, | 65 |
| 4 | 5 | ,, | ,, | 0·15 ,, | ,, | May 16th | 31 |
| 5 | 23 | ,, | ,, | 0·6 ,, | May 4th | June 1st | 28 |
| 6 | 15 | ,, | Recurrent. | 0·45 ,, | ,, | May 23rd | 19 |
| 7 | 10 | F. | First attack. | 0·24 ,, | May 17th | July 2nd | 46 |
| 8 | 10 | M. | ,, | 0·24 ,, | ,, | June 3rd | 17 |
| 9 | 4 | ,, | ,, | 0·12 ,, | ,, | ,, 25th | 39 |
| 10 | 16 | ,, | ,, | 0·48 ,, | June 11th | July 18th | 37 |
| 11 | 4 | ,, | ,, | 0·12 ,, | ,, | ,, 3rd | 22 |
| 12 | 16 | F. | ,, | 0·48 ,, | ,, | ,, 2nd | 21 |
| 13 | 4 | ,, | Recurrent. | 0·12 ,, | ,, | ,, | 21 |
| 14 | 15 | M. | ,, | 0·4 ,, | ,, | ,, | 21 |
| 15 | 9 | ,, | ,, | 0·2 ,, | ,, | ,, | 21 |
| 16 | 15 | ,, | ,, | 0·4 ,, | August 27th | Sept. 5th | 9 |
| 17 | 7 | ,, | First attack. | 0·2 ,, | ,, | ,, 16th | 20 |
| 18 | 14 | F. | Recurrent. | 0·4 ,, | ,, | ,, | 20 |
| 19 | 8 | M. | ,, | 0·2 ,, | ,, | Sept. 9th | 13 |
| 20 | 18 | F. | ? | 0·6 ,, | ,, | ,, 5th | 9 |
| 21 | 35 | M. | Recurrent. | 0·6 ,, | Sept. 10th | ,, 16th | 6 |
| 22 | 10 | ,, | ,, | 0·2 ,, | ,, | Oct. 26th | 46 |
| 23 | 7 | ,, | First attack. | 0·2 ,, | ,, | Sept. 25th | 15 |
| 24 | 6 | ,, | ,, | 0·2 ,, | ,, | ,, 30th | 20 |
| 25 | 14 | ,, | Recurrent. | 0·4 ,, | ,, | ,, 23rd | 13 |
| 26 | 9 | ,, | ,, | 0·2 ,, | ,, | ,, | 13 |
| 27 | 17 | ,, | ,, | 0·6 ,, | Sept. 17th. | Sept. 30th | 13 |
| 28 | 35 | F. | ,, | 0·6 ,, | ,, | ,, 23rd | 6 |
| 29 | 18 | ,, | ,, | 0·6 ,, | ,, | ,, | 6 |
| 30 | 18 | M. | ,, | 0·6 ,, | Oct. 3rd. | Oct. 9th | 6 |
| 31 | 12 | F. | ,, | 0·3 ,, | ,, | ,, | 6 |
| 32 | 13 | ,, | ,, | 0·3 ,, | ,, | Oct. 26th | 23 |
| 33 | 11 | M. | ,, | 0·3 ,, | ,, | Nov. 7th | 35 |
| 34 | 13 | ,, | ,, | 0·3 ,, | ,, | Oct. 9th | 6 |
| 35 | 14 | F. | ,, | 0·4 ,, | ,, 15th | ,, 26th | 11 |
| 36 | 8 | ,, | ,, | 0·2 ,, | ,, | Nov. 29th | 45 |
| 37 | 15 | M. | First attack. | 0·4 ,, | ,, | Oct. 26th | 11 |
| 38 | 8 | ,, | Recurrent. | 0·2 ,, | ,, | ,, | 11 |
| 39 | 11 | F. | First attack. | 0·3 ,, | ,, | Nov. 8th | 24 |
| 40 | 5 | ,, | ,, | 0·2 ,, | ,, | Dec. 4th | 50 |
| 41 | 15 | ,, | Recurrent. | 0·4 ,, | ,, | Nov. 12th | 28 |
| 42 | 11 | M. | ,, | 0·2 ,, | ,, | ,, 13th | 29 |
| 43 | 10 | F. | ,, | 0·2 ,, | ,, | Oct. 26th | 11 |
| 44 | 7 | M. | ,, | 0·2 ,, | ,, | Dec. 4th | 50 |
| 45 | 7 | ,, | ,, | 0·2 ,, | ,, | Nov. 9th | 25 |

*Remarks.*—Case 27: Was previously injected with 0·3 grm. salvarsan on May 25th, 1911, and discharged as cured on August 2nd, 1911. Case 29: Had been under treatment in Yaws Hospital for 15 months previous to injection. Case 34: Had been under treatment for four months previous to injection. Case 38: Had been under treatment for seven months previous to injection. Case 42: Was previously injected with 0·15 grm. salvarsan on April 15th, 1912, and discharged on May 3rd. The disease recurred on Oct. 8th.

Cases 29, 34, and 38 were patients who had been in the Yaws Hospital under treatment for 15 months, 4 months, and 7 months respectively, previous to

injection, without displaying any improvement or change in the condition of the disease, and each displayed the remarkably rapid action of the drug in this disease. In two previous cases, not included in this series, where injection of salvarsan was made after 17 months and 18 months of previous treatment with mercury and iodides, the condition cleared up completely in 19 and 17 days respectively.

The inference that preliminary treatment with mercury and iodides expedites the action of the salvarsan is not supported by observations made upon cases where these drugs were administered for long periods in the treatment of syphilis, and where salvarsan was subsequently given. The average duration of stay in hospital after injection was 23·6 days, as compared with an average stay of 3½–4 months of the patients not injected. Owing to the difficulty in returning children to their parents the average duration of stay is longer than it otherwise would be, and in this connexion it will be noted that, with one exception, every case remaining in the hospital for longer than 30 days after injection was under 12 years of age.

From an administrative point of view the advantages of this form of treatment are obvious, since, in comparison with a similar number of non-injected cases, the saving effected in dietary alone, after deducting the cost of the drug used in this series, was £75. Still more important, the possibility of completely eradicating the disease from those places in which it exists appears nearer attainment than ever before. This, however, involves the proper segregation of all infective cases, the compulsory notification of the disease, an efficient medical examination of school children, and the refusal to admit cases of yaws into the ports of entry other than through the Yaws Hospital. These measures, in conjunction with this treatment, would aid materially in completely eradicating the disease from any community, and the time occupied in completing the process would depend upon the size of the country and the efficiency with which the measures suggested were enforced.

I do not overlook the fact that cases do exist in which the administration of the drug is dangerous, and for these the treatment with mercury and iodides would still be needed. The pathological conditions which contraindicate the use of salvarsan are such as can be made out clinically, and therefore the risk attendant upon its use can be reduced to a minimum. This minimum would include those cases in which a natural intolerance of arsenic exists, and of such cases I have met two, both previous to the present series.

It has been suggested that the intravenous injection of the drug would secure more satisfactory results than those obtained by the intramuscular method, but in view of my own experience, the increased risk attendant upon the intravenous method, and the need for skilled nursing subsequent to injection by that method, I do not consider that the added danger would be compensated by the slight and problematical improvement in the statistics.

PRESENTATION TO A VETERAN MEDICAL MAN.—Dr. Richard Vernon, of Audley, who is now in his ninety-seventh year, was lately the recipient of an illuminated address as an expression of the regard in which he is held by the Wesleyan Methodists in that district. The address set forth that during 60 years Dr. Vernon had exerted a helpful influence upon the whole parish and district of Audley, and that his unstinted generosity had laid the Wesleyan Methodists under a special debt of gratitude.

## CHRONIC POLYORROMENITIS (MULTIPLE SEROSITIS) SIMULATING INTRA-THORACIC GROWTH.

BY REGINALD G. HANN, M.R.C.S. ENG., L.R.C.P. LOND.

THE patient whose illness I record presented during life a clinical puzzle of great difficulty, for as time went on it became clear that the diagnosis originally and confidently made of intra-thoracic growth must be wrong, though it was not easy to offer any other explanation of symptoms so diverse as laryngeal stridor, exophthalmos, pigmentation of the skin, and ascites; the absence of a reliable history was an additional handicap. Rolleston[1] mentions a case in St. George's Hospital diagnosed as mediastinal growth, but most cases have probably been mistaken for portal cirrhosis of the liver.

An unmarried woman, aged 41, of weak intellect, and in very poor circumstances, was first seen in March, 1908, complaining of swelling of the feet and enlargement of the abdomen of about a month's duration. Her friends said she had never been robust and was always very thin; during the past week she had become so ill and short of breath that she was obliged to keep her bed; she had constant pain in the right side of the chest. Up to six months ago they maintained that she had shown no signs of illness except for some swelling of the feet two years ago. There was no history of alcoholism.

*Condition on March 11th, 1908.*—Considering the short duration of the symptoms and the fact that the patient had only been confined to bed for a week, her appearance was most striking. She was extraordinarily thin, her skin was dark and dirty-coloured, with deeper and more definite pigmentation about the axillæ, nipples and pubes, and in parts of the abdomen. There was protrusion of the eyeballs, more evident on the right side; the face and neck were puffy and cyanosed, the lips and ears being especially dark. The veins of the face, neck, and about the right shoulder were enlarged, and the external jugular, in which the engorgement was especially great, did not empty on inspiration. Respiration was rapid, with some indrawing of tissues of the lower part of the neck. The cyanosis was least when lying upon the right side and most when sitting up, especially if leaning forward. There was constant inspiratory stridor; no affection of voice; no difficulty in swallowing. She had at no time any cough or expectoration. The right axillary glands were easily felt; with this exception none could be detected above the clavicles or elsewhere. There was little or no movement at the base of the right lung, the chest wall being manifestly flat. The base posteriorly was dull, and this dulness extended in front to the level of the fourth rib; it was continuous to the left with the cardiac dulness and below with the hepatic dulness. Over this area there were no breath or voice sounds; above it in front a few adventitious sounds were heard, apparently in compressed lung. The left lung seemed normal. The heart was certainly not displaced to the left, but the apex was low. Sounds somewhat muffled, conducted well into the right axillary line over the dull area; second sound reduplicated; no bruit. The abdomen was considerably enlarged; the shape suggested an ovarian tumour; much free fluid was present. Nothing else abnormal to be felt. The appetite and digestion were good; the bowels were normal. The menses were regular and profuse. There was no jaundice or fever. The urine was normal. A diagnosis was made of intrathoracic growth occupying the space and displacing the lung between the heart and the upper surface of the liver, with a secondary mediastinitis accounting for the interference with the superior vena cava. The patient was seen shortly afterwards by the late Dr. E. F. Trevelyan, who agreed with this diagnosis.

*Progress of the case.*—The patient kept her bed continuously, and at the end of August, 1908, the following notes were made. She was weaker and less able to

attend to herself even in bed. There was less prominence of the veins of the head and less cyanosis. Inspiratory stridor unchanged. Thorax: Flattening of the right chest below the nipple line and loss of respiratory movement were more pronounced; there was almost absolute dulness extending downwards from the level of the third rib with entire absence of air entry. Behind there were dulness and absence of air entry up to the level of the scapula; it suggested fluid, while in front the signs suggested solid tissues. An X ray examination showed a dome-shaped shadow at the right base with loss of movement of the diaphragm on respiration. Abdomen: The ascites had gradually diminished until it was no longer possible to detect fluid. The liver, which could not be felt five months ago even by "dipping" with the finger tips, now extended down almost to the anterior superior iliac spine; surface smooth, not tender, its edge was sharp. In October, 1908, the edge of the liver was at the level of the umbilicus, and it gradually receded until it could only just be felt, and so it remained until her death. Undoubted and general improvement, slight though it was, slowly took place, and for the next three years she was able to leave her bed and often to get about the house. Her chief complaint was of abdominal pain; at times it was clear that there was some ascites, and more rarely the feet were œdematous. She was always very weak and soon tired, and she never gained weight. During 1912 her condition changed steadily for the worse, and she was bedridden. Almost the only change in physical signs was an increase in the ascites necessitating a tapping on Oct. 7th, 1912, when 16 pints of clear straw-coloured sterile fluid were withdrawn; the pathological report said this appeared to be inflammatory in origin rather than a passive exudation. The fluid re-collected and a similar quantity was removed on Dec. 28th, 1912, and again on Feb. 21st, 1913, when it was blood-stained. The enlargement of the abdomen quickly returned, but was chiefly due to gross flatulent distension of the intestines, and an attempt on June 3rd to find fluid by puncture failed. The patient died on July 1st, 1913.

Dr. J. P. Bibby performed the limited examination which was permitted, of which the following notes are given.

The right pleural cavity was completely obliterated. The parietal pleura, which was firmly adherent to the visceral pleura, was everywhere thickened, this being greatest over the lower lobe, where the membrane was a quarter of an inch thick and of the consistence of cartilage. At the extreme lower part it was puckered and dipped into the lung tissue. Left pleura: Considerable amount of straw-coloured fluid in pleural cavity. One adhesion only, this being a well-marked one at the extreme apex of the upper lobe where the visceral pleura over an area the size of a shilling was thin, white, and cartilaginous. Right lung: Upper lobe normal; lower lobe shrunken, airless with, above, some bronchiectasis. Left lung: Upper part normal; lower and posterior parts congested and airless. Œsophagus: No engorgement of veins. The bronchial glands were small, discrete, tough, black (deposit of carbon). The pericardium was firmly adherent to the heart except for a circular area about 1¼ inches in radius at the extreme apex. Most of the anterior and posterior walls of the pericardium consisted of long calcareous plaques of varying thickness, the condition being most advanced on the posterior surface; the base of the heart might be said to be enclosed in a rigid case. But for adhesions these changes were confined to the visceral layer of pericardium. There was advanced mediastinitis. The liver was small and showed no thickening or opacity of the peritoneal covering. The surface of the liver was finely granular. There was an increase in its connective tissue and extensive fatty charge in the cells; microscopically there was slight but definite portal cirrhosis. (These changes correspond in the main to the pericarditic pseudo-cirrhosis of Pick.[2]) The gall-bladder was not abnormally thick; no gall-stones. Kidney: Capsule somewhat thickened, not opaque except in one small area; stripped with difficulty, leaving definite granular surface. Cortex narrow; good deal of fat about pelvis. The peritoneal cavity was practically obliterated so that the hand could not be inserted owing to the dense and universal adhesions. A microscopic examination revealed no traces of tuberculous disease.

The essential mistake made in attempting to arrive at a diagnosis in this case lay in the misunderstanding of the meaning of the signs at the base of the right lung. There the signs seemed undoubtedly due to the presence of a solid tumour with a well-defined and rounded upper surface, and it was the effort to explain all else upon this basis, together perhaps with the latency of the pericarditis, which led to an entirely erroneous diagnosis.

With regard to the duration of the disease, it seems safe to assume that the swelling of the feet noticed by the woman two years before she came under observation was an inaugural symptom of the polyserositis, so that her illness must have extended to seven or eight years. This is considerably longer than the average of about four and a half years in 36 cases extracted from Kelly's[3] list. Again, if this œdema is rightly explained by a transitory myocardial inefficiency due to the presence of pericarditis, it points to the pericarditis being an early, if not the earliest, morbid change—a form of the disease to which Kelly in particular has drawn attention.

The consideration of the ascites introduces one of the most interesting features of the disease. It has been explained variously as due to: 1. Interference with the venous return from the abdomen by changes caused (*a*) by the perihepatitis, or (*b*) by the "cyanotic induration" of the liver. 2. Myocardial incompetence following the pericarditis; comparable to the ascites occasionally seen before general œdema in failure of compensation following chronic disease of the heart. 3. Chronic peritonitis.

In proof of the first of these suggestions little or no post-mortem evidence has been offered, the second must be very unusual, and it is the third, largely owing to the writings of Hale White, which has become commonly adopted. Without hesitation I regard the chronic peritonitis as the cause in the case here described, for with the peritoneum deeply involved and ascites (present, by the way, in each of the stages of enlargement and recession of the liver) an outstanding clinical feature, there was no perihepatitis. Hale White[4] has seen two cases in which with universal perihepatitis and no chronic peritonitis there was no ascites; in my case there was no perihepatitis but chronic peritonitis and ascites.

The chronic form of polyorromenitis has been ascribed to infection by the tubercle bacillus (Picchini,[5] &c.), but there is singularly little published evidence in favour of this theory. Acute rheumatism with its proclivity for causing effusions would seem a likely cause, and such cases have been observed.[6] In the present case no evidence on this point is available.

There is little to say about the treatment of this case. Large doses of potassium iodide were given during the first year, and I was convinced that some good ensued. Whether any advantage would have been gained by earlier and repeated tapping of the abdomen is doubtful, and it is unlikely that it would have delayed the end.

*Bibliography.*—1. H. D. Rolleston: Diseases of Liver and Gall-bladder, 1912. 2. Pick: Zeitschrift für Klinische Medicin, Berlin, 1886. 3. A. O. J. Kelly: American Journal of the Medical Sciences, 1903. 4. Hale White: Allbutt and Rolleston's System of Medicine, 1908. 5. Picchini: Il Morgagni, 1891. 6. E. Matthew: Edinburgh Medical Journal, 1912. Also F. Taylor: THE LANCET, vol. ii., 1895, and Brit. Med. Jour., vol. ii., 1900; and Nicholls, Studies from the Royal Victoria Hospital, Montreal, 1902, vol. i. Kelly (loc. cit.) gives a comprehensive list of references.

Leeds.

# SOME CAUSES OF DISAPPOINTMENT FOLLOWING REMOVAL OF TONSILS AND ADENOIDS.

BY WILLIAM WILSON, M.D., B.SC. MANCH.,
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THE routine tonsil and adenoid operation, like all routine methods, shows a considerable percentage of failures, more especially in regard to hearing capacity. Recently I have entirely relinquished the rapid operation under ethyl chloride, and have substituted a more painstaking method under chloroform and ether, specially adapting it to the conditions present in the nasopharynx. The reason for this is that whilst results were good with regard to efficient nasal respiration the ventilation of the tympanic cavity was not so frequently satisfactory; hence some amount of deafness persisted. To understand the reasons for these failures, it is necessary to review briefly the surgical relations of the Eustachian orifices.

The ostium pharyngeum is situated rather less than half an inch behind the posterior end of the inferior turbinal. (Fig. 1.) The cartilage is shaped

FIG. 1.

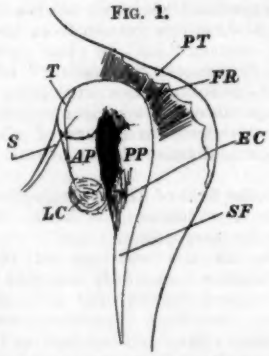


Diagram showing the relations of Eustachian orifice to Rosenmüller's fossa, and to the muscles acting upon the aperture. LC, Levator cushion (levator palati muscle). S, Salpingo-palatal fold. T, Origin of tensor palati muscle. PT, Pharyngeal tonsil. FR, Fossa of Rosenmüller. EC, Eustachian cushion. SF, Salpingo-pharyngeal muscle.

like a question mark (?), showing a short anterior horn and a larger posterior cartilaginous horn; the anterior horn is prolonged as a mass of somewhat soft fibrous tissue. When the Eustachian orifice opens, as in swallowing, the two pillars separate and the lower border is pushed up: the ostium thus assumes a triangular form. The muscles acting upon the orifice are three in number—the dilator tubæ (a portion of the tensor palati), the levator palati, and the salpingo-pharyngeus. The first takes origin from the anterior cartilaginous horn and from the areolar tissue below it; it stretches over the hamular process and is inserted into the soft palate; its action is to pull forward the anterior fibrous wall. The levator palati forms a projection just below the ostium, and when contracted bulges into the lumen; it also is inserted into the soft palate; its action is to push up the floor and push back the posterior cartilage. The salpingo-pharyngeus is a tiny muscle which causes the salpingo-pharyngeal fold; it pulls down and back the posterior cartilaginous horn.

Politzer has demonstrated that the healthy membrana tympani bulges in and out with a rhythmic motion, whilst every act of swallowing causes the tube to open and the membrana to fall in, so that during the act hearing is dulled. By these means the tympanic cavity is constantly being ventilated.

From the above it will be readily understood that anything preventing this opening of the pharyngeal orifice—whether paralyses of soft palate or pharynx or direct mechanical obstruction to the cartilage from tumours or lymphatic tissue, will cause stagnation of air in the middle ear. Soon the membrana tympani will fall inwards and later will become adherent to the inner wall of the tympanic cavity.

Now, if the nasopharynx be carefully examined (under the anæsthetic a thorough digital exploration should be made) there will be detected behind the Eustachian orifice a vertical channel which opens into a wider chamber; in children suffering from deafness this chamber is usually more or less full of lymphatic tissue pressing anteriorly upon the posterior aspect of the Eustachian cartilage. It will be found also that the main adenoid mass (the enlarged pharyngeal tonsil) does not encroach upon the tube; the soft palate is in a state of laxity and will readily allow this examination. (Fig. 2.) This

FIG. 2.

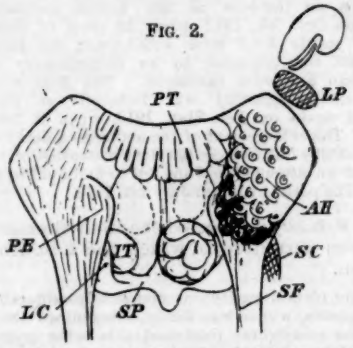


Diagram showing posterior ends of inferior turbinals stretching soft-palate muscles and thus preventing adequate opening of Eustachian orifice; also adenoid tissue of Rosenmüller's fossa preventing opening of Eustachian orifice backwards. LC, Levator cushion. PE, Posterior cornu, Eustachian orifice. PT, Pharyngeal tonsil. LP, Levator palati muscle. AH, Adenoid hypertrophy in fossa of Rosenmüller. SC, Superior constrictor muscle. SF, Salpingo-pharyngeal fold. SP, Soft palate. IT, Inferior turbinate.

laxity of the palatal muscles affords a good sign of the presence of adenoids; if the patient repeats the sound "Ah" the soft palate, examined through the anterior nares, will not be observed to rise upwards. After removal of this main adenoid mass, with the return of nasal respiration we can observe a return of tonus in the soft palate; yet the membrana tympani remains retracted. This is due to the inability of the tensor palati, levator palati, and salpingo-pharyngeus to open the tubal ostium on account of the mechanical obstruction from the growth extending from Rosenmüller's fossa. The ear can be ventilated with difficulty by forcible politzerisation, but more easily by catheterisation which mechanically forces air through the ostium. Is it not better to remove carefully all remains of adenoid tissue from around the Eustachian orifice, to treat it locally with astringents (e.g., silver nitrate 10 per cent.), and allow the patient to ventilate his own ear in the natural way? The smallest ring-knife or Mackie's curette will be found best for this purpose, and should be guided by the finger of the other hand.

Many failures result from neglect to remove the enlarged posterior end of the inferior turbinals, which are far more obstructive to respiration than are the faucial tonsils; of course, in many cases they would diminish in size after removal of the pharyngeal tonsil, but as this would occupy from two to three years, during which time the nasal obstruction would continue, why operate at all? A patient who undergoes an operation for naso-pharyngeal obstruction deserves a perfectly functional result. It is no use scraping the pharynx as a routine when the entire obstruction is due to nasal stenosis.

The posterior ends may be removed by snipping them away with one of the guillotines invented by Lake, but often it is impossible to get these instruments easily down both sides of the nostril. In this case a strong nasal snare may be employed; the loop should be guided over the posterior ends with a finger in the nasopharynx.

Of special interest, also, is the persistence of symptoms of "throat cough" and laryngeal catarrh after operation. In many cases this will be found to be due to either a septic condition or actual hypertrophy of the lingual tonsil, which may be in contact with the epiglottis. It is very possible that after complete extirpation of the faucial and pharyngeal tonsils the remaining lingual tonsil undergoes some compensatory hypertrophy.

If there is found such a degree of cartilaginous septal deviation that one nostril is completely blocked, it is essential to obtain a free airway or sooner or later an acute catarrh supervening will cause either collapse of the membrana tympani or middle-ear suppuration on that side. The best operation is some form of Watson-Gleason operation which can be performed with a scalpel and a pair of Killian's septal compression forceps. If the deflection is slight it may be rectified by a dental splint in many cases.

After-treatment is quite as important as the operation itself. It consists of (1) breathing exercises daily; (2) politzerisation weekly for six weeks, then omitted for one week, and repeated for six weeks if required; and (3) dental appliances necessary perhaps to restore a narrow palatal arch and septal deviation which is not severe enough to require operative treatment.

Manchester.

## A NOTE ON PERFORATION OF GASTRIC ULCERS INTO THE HEART ITSELF,

### WITH REPORT AND PHOTOGRAPH OF A CASE.

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THIS condition is one of extreme rarity. After a prolonged search I have been able to find only four cases recorded in the literature, and in only one of these was the diagnosis suggested before death.

The first case to be recorded was that of Oser[5] in 1880. His clinical record is accompanied by full details of the post-mortem findings of Hans Chiari.[3] The patient was a woman, aged 71, who lived three and a half days after the first hæmatemesis. The ulcer was a round one measuring 2 cm. across; it was situated on the lesser curvature, at the cardiac end of the stomach, 5 cm. from the cardiac orifice.

In the next year Brenner,[1] also in Vienna, published the second case. In this case both hæmatemesis and melæna occurred before death, which did not take place for fully four days after the onset of the symptoms. The ulcer was again situated on the lesser curvature, 5 cm. from the cardia, but was of the size of the palm of the hand ("fast handtellergross"). At the left base there were old pleural adhesions of rheumatic origin.

The third case, the first to be recorded in English, was that of Finny,[4] in 1886. The ulcer was on the anterior wall of the stomach, 2½ inches from the cardiac orifice and 2 inches from the lesser curvature. The pericardial cavity had been obliterated by old rheumatic pericarditis. The perforation was direct into the left ventricle, about an inch from the apex. It was hidden by a musculus papillaris attached to the posterior surface of the mitral valve. There was a serous exudate in the left pleural cavity. There were adhesions between the pulmonary and diaphragmatic pleura and also between the stomach and the diaphragm. The bronchial glands showed caseation and some calcification. The stomach and the whole length of the intestines were full of fluid blood.

Brunniche[2] published the fourth case in 1887. His patient was a male, and the ulcer was on the lesser curvature. On the posterior surface of the left ventricle was an ulcer of the size of a shilling The stomach contained a blood clot of the size of the fist. The ulcer was not covered by any membrane, there was no sign of any pus, and the heart itself did not contain any stomach contents.

In 1894 Ludwig Pick[6] published a monograph on perforation of the diaphragm by gastric ulcer, and of 28 cases collected by him only 10, or 35·7 per cent., involved the pericardium. Of these 10 only the 4 I have referred to, or 14·3 per cent. of the whole, involved the heart muscle itself. His monograph makes it clear that in these cases a perigastritis is always present, and that it is *vid* the most anterior portion of that part of the diaphragm on which the heart rests that the entry is gained. Of 10 of Pick's cases in which the ulcer was on the lesser curvature, 6 perforated the pericardium, 3 the left pleura, and 1 the mediastinum. Where the ulcer was (5 cases) situated in the fundus, the left pleura was always perforated. Of 3 in the cardiac region, 2 perforated the left pleural sac and the third the pericardium. All ulcers on the posterior wall perforated the left pleura, while the one case on the anterior wall involved the heart muscle. All were chronic ulcers with thickened and indurated edges, and their bases adherent to neighbouring organs, so that they were not able to cicatrise, contract, and heal up. As one would expect—taking into account the relationship of the pylorus to the liver—in spite of the frequency of pyloric ulcer, it was only met with 3 times in Pick's 28 cases of perforation of the diaphragm.

In my own case the subject was a woman aged 70. She went to bed as usual at 11 o'clock on a Sunday night. At 8 o'clock on the following morning she was found kneeling at the side of the bed, dead and cold. The bed had been slept in. The chamber utensil contained blood. I ascertained that she had not found it necessary to obtain medical advice for nine or ten months previously; the medical man she then consulted has been good enough to inform me that she complained of indefinite pains about the lower part of the chest and in the epigastrium, there being no physical signs of organic disease, either thoracic or abdominal. She was given one or two bottles of medicine by him, and as she did not consult anyone again presumably felt better.

I made a necropsy about 40 hours after death, in a very poor light and in very unsuitable surroundings. The body was covered with vermin. There was some œdema of the legs. The meninges of the brain were thickened and the convolutions atrophied. The pleural cavities were everywhere obliterated from old pleurisy, and the pericardium was also adherent throughout. The myocardium was pale and flabby and the mitral orifice incompetent. At the posterior part of the left ventricle, about halfway between the apex of the heart and the base of the ventricle, there was a small communication with the cavity of the stomach, through which a small glass rod could be passed, as shown in the figure. In this region the heart, pericardium, dia-

From a photograph showing the site of the perforation.

phragm, and stomach wall were firmly adherent together. It was quite impossible to separate any of these structures one from another. The left ventricle itself was quite empty; there was no sign in it of any stomach contents. On opening the stomach its cavity was found to be nearly filled by a large blood cast, but there was also some meat. The blood in the stomach was one large firm clot, but down the whole of the rest of the alimentary canal fluid blood was found. There were some perisplenitis and perihepatitis. The aorta showed well-marked atheroma. Dr. H. Heathcote has kindly made sections of portions of the heart muscle for me, and examined them for fatty changes. With regard to sections through the left ventricular wall he reports that there was an excess of leucocytes in the epicardium, that there was some fatty infiltration of the muscle, and a good deal of yellowish-brown pigment in the cells. In the papillary muscle he found some fragmentation of the myocardium, and (staining with charlach R and hæmalum) a diffuse purplish-pink staining of the fibrous ends of the papillary muscle at the attachment of the chordæ tendineæ, probably indicating fatty deposit.

The ulcer of the stomach was of the size of a half-crown. Its edge was slightly raised owing to firm adhesions to the subjacent structures which had filled in the gap in the stomach wall by a false wall consisting of the structures which naturally lie between this point and the heart wall. Its floor was therefore deep and crateriform, and soft as compared with the true stomach wall. The exact position of the ulcer was on the anterior wall of the stomach near to the lesser curvature, the edge being an inch from the right edge of the cardiac orifice. The distortion of the stomach owing to the adhesions was very great, and in the photograph it has perforce been accentuated, owing to the difficulty experienced in bringing both the ulcer and the opening into the heart into suitable positions to show in the same view. The greater curvature has been turned upwards and to the left, while the lowest portion of the œsophagus and the cardiac orifice appear in the figure to the right of the ulcer.

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Manchester.

THE HEALTH OF BIRMINGHAM.—The medical officer of health's report for the third quarter of this year records a birth-rate of 26·8 per 1000, a slight increase on the rate in the same quarter of the two preceding years. The death-rate was 14·0 per 1000, a higher rate than in the corresponding quarter of some recent years, though lower than in any year prior to 1907. In 1912 the death-rate was 10·9; in 1911, 16·0; and in 1910, 10·9. Increases occurred in the death-rates from diarrhœa and enteritis, cancer, pneumonia, diseases of the heart, infantile debility, cerebral hæmorrhage, bronchitis, whooping-cough, non-pulmonary tuberculosis, Bright's disease, and premature birth, whilst decreases were recorded for measles, pulmonary tuberculosis, and old age. Eight of the great towns of England had a higher death-rate and seven a lower. The infantile death-rate was 161 per 1000 births as compared with 91 in 1912 and 238 in 1911. The principal cause of the increase was the prevalence of diarrhœal disorders. Up to three months of age about 82 per cent. of the babies in Birmingham are breast fed, and the mortality among these from diarrhœa and enteritis was 4·7 per 1000, whilst among the bottle-fed babies or partly bottle-fed it was 95·5 per 1000. 2229 cases of scarlet fever were notified during the quarter, as compared with 1008 as the average in the third quarters of the years 1903–12; 259 cases of diphtheria were notified, the same number as the average; and there were 919 notifications of pulmonary tuberculosis. The elementary school teachers reported 89 cases of measles during the quarter, compared with 862 in the same period last year, and 587 cases of whooping-cough, compared with 232. Scarlet fever was more prevalent than in any third quarter for many years past. The type of disease was mild and the case mortality only 1·7 per cent. The incidence of the disease was more severe in the suburban than central districts. Of the 2229 cases, 1647 were removed to hospital. 762 patients who had applied for treatment for tuberculosis were examined, and of these 423 were recommended for admission to a sanatorium, 260 for dispensary treatment, and 47 for domiciliary treatment. The total of notified cases of tuberculosis numbered 1076.

# Medical Societies.

## ROYAL SOCIETY OF MEDICINE.

### SECTION OF MEDICINE.

*Non-cancerous Tumours of the Stomach.—Calcareous Deposit on a Fish Bone in the Parotid Duct.—A Change in the Pelvis in Prepuberal Atrophy of the Testicles.—Combined Sclerosis of the Spinal Cord with (?) Dystrophia Adiposo-genitalis.*

A MEETING of this section was held on Nov. 25th, Dr. SAMUEL WEST, the President, being in the chair.

Dr. A. M. GOSSAGE and Dr. J. A. BRAXTON HICKS described two cases of Non cancerous Tumour of the Stomach (one a fibromyoma and the other a fibrosarcoma) and showed specimens. Both patients had been admitted into hospital when too ill for surgical intervention, though the removal of the tumours should have been easy. The condition was not diagnosed during life. Death occurred in each case from hæmorrhage into the stomach, the tumours being submucous, though hæmatemesis had proved an uncommon cause of death in this class of gastric tumour. The patients were adults in middle life, one a male and the other a female.

Dr. G. NEWTON PITT showed a case of Recurrent Distension of the Parotid Gland due to Calcification round a Fish-bone retained in Steno's duct for over a year. The patient was a man, aged 58, who over a year ago complained that a fish-bone had stuck in his throat. He referred the discomfort to the pharynx, and nothing could be discovered on careful examination. The symptoms had disappeared, but from time to time there had been discomfort with recurrent distension of the right parotid, which latterly had become more marked. Sir W. Arbuthnot Lane had seen him and thought that there was a calculus in the duct. An X ray picture showed an elongated, slender curved shadow in the line of the duct behind the edge of the masseter, and this was slightly bifurcated in front. Exploration from inside being ineffectual the gland was cut down upon and no calculus could be discovered, but the duct appeared to be thickened and atheromatous. A tube was passed down the duct and out of the mouth, and the wound closed. It had healed, but the gland remained very distended from time to time, and finally on the twelfth day the tube came out, and two days later the wound broke down. On the eighteenth day an elongated shell of bone was extruded, which corresponded to the shadow, and had formed round a fish-bone 12 mm. long, the anterior end of which was bifurcated and hence had been unable to move except up towards the gland. The wound then healed up as generally happened when the body was removed. Dr. Pitt said that foreign bodies in the salivary ducts were rare, only between 50 and 60 cases being recorded, 27 having been found in Wharton's duct, 19 in Steno's, and 2 in the sublingual. Straw or blades of grass were found 14 times, fish-bones 7, bristles 6, ears of corn 5, feathers 3, fruit-seeds and splinters twice, and a piece of a tooth-pick, a hair, a shot, and a piece of chestnut each once. The onset might be obscure and the symptoms not severe; at other times they were very acute, especially when the gland suppurated.

Dr. BATTY SHAW and Mr. R. HIGHAM COOPER communicated a paper on a Change in the Pelvis occurring in a case of Prepuberal Atrophy of the Testicles. This is published in full in another column.

Dr. PERCY KIDD and Mr. E. A. TOZER communicated a short paper on a case of Combined Sclerosis of the Spinal Cord with (?) Dystrophia Adiposo-genitalis. The patient, a Polish Jew, aged 5 years, was the second of three children, the others being unaffected. He was a very fat boy, with olive complexion, black hair, and dark almond-shaped eyes. The genital organs were very undeveloped. His disposition was bright, cheerful, and intelligent. Speech was unaffected. The cranial nerves were normal. No nystagmus was present. The arms were not affected. The legs were spastic and ataxic, the knee-jerks being very glib. Ankle clonus was present on the left side and the plantar reflex was extensor on both. He could not stand alone or walk. Sensation seemed unaffected. His sense of posture was very defective. There was incontinence of urine. The optic discs were pale and their edges sharply defined. The fundus was pigmented. No hemianopia was present. Mr. Gilbert Scott reported that a skiagram showed that the pituitary fossa was shallow and ill-defined. This did not suggest pituitary tumour but increased intracranial pressure. The history was as follows: Diphtheria preceded by frequent convulsions occurred at the age of 16 months. Since then the patient had been liable to attacks of malaise, in which he refused to eat, "went very yellow," had a cough, and slept heavily. Between the attacks he seemed well. He had attended many hospitals. At one hospital he was said to have something wrong with his lungs. Subsequently at another hospital about eight months ago he had bronchitis, nephritis, and symptoms suggesting a cerebellar tumour. Since this time he had been unable to walk. Soon after this he was admitted into a third hospital, where an operation for a tumour in the head was recommended, but permission was refused by the parents. Inability to walk had persisted, and there had been incontinence of urine and occasionally of fæces. The parents thought that the left arm and leg had become weak also.

### SECTION OF ELECTRO-THERAPEUTICS.

*Technique and Standardisation of Bismuth Meals.*

A MEETING of this section was held on Nov. 21st under the presidency of Mr. C. THURSTAN HOLLAND, when a discussion took place on the Technique and Standardisation of Bismuth Meals.

Dr. REGINALD MORTON, in introducing the debate, said it was the outcome of a paper by Dr. A. F. Hertz at the last annual meeting of the British Medical Association, when a resolution was adopted in favour of the establishment of a standard meal for radiographic examination. The data which he had collected from various radiologists with a view to this debate showed that, within reasonable limits, the exact quality and quantity of the meal did not greatly signify. But the great object was to arrive at results which were comparable. The meals now being given ranged from 5 oz., containing 2 oz. of bismuth, to a 20 oz. meal containing 1½ oz. of bismuth. On only one point did there seem to be agreement—namely, that the meal should be as palatable as possible. As to quantity, those who used a meal of 20 oz. admitted that it was difficult to get the whole of it consumed. Quite half those he had written to used a 10 oz. meal, and the amount of bismuth or barium was from 1 to 4 oz., the average being 2 oz. The quantity of opaque salt was more important than the percentage it bore to the whole meal. Only a minority of practitioners definitely preferred barium to bismuth, but two or three times as much of the latter was required to produce the same degree of opacity. He was anxious to know what happened when the residue of a barium meal became "banked up" in the last few inches of the ileum, especially as the tissues of those who came for examination were soft and flabby. A well-known firm of chemists had succeeded in producing a light form of bismuth carbonate, so light that it remained suspended in water for a considerable time, and it seemed to cause as dense a shadow as the ordinary carbonate. He hoped to hear about the relative influence of bismuth and barium on peristalsis. It was said that bismuth carbonate completely neutralised the gastric juice, which, of course, was not desirable, but he had not heard this objection urged against oxychloride of bismuth. There were differences in the acuity of visual perception among observers, so that what was plainly seen by one might not be evident to another. Two ounces was the quantity of bismuth used by most radiologists, and it was the average of those to whom he had written. Two-thirds of the replies spoke of bread-and-milk as the medium of suspension; others used porridge, blanc mange and jelly, or in an emulsion of lactose. In France gum solutions were much used for the purpose, and in America thick buttermilk. It seemed to be agreed that the consistence should be that of porridge. His own idea of a standard meal would be: Into the bowl from which the meal was to be taken was placed 2 oz. of white bread (without crust) cut into cubes the size of dice. Eight ounces of boiled milk into which had been stirred 2 oz. of bismuth carbonate or oxychloride (or 3 oz. of pure barium sulphate) would be added, and after sufficient cooling

sugar added to suit. There was a great difference of practice in the matter of the preparation of the patient, but he hoped a spirit of compromise would reduce that to a good working rule. He would order an aperient to be taken 36 hours before the examination, and the rectum cleared out with an enema early on the morning of the examination, the bismuth meal being given in place of the ordinary breakfast. Except in special cases the patient should continue his regular meals, but no meals should be taken within four hours after the bismuth. After the meal reached the large intestine it was practically impossible to work to a time-table, but the practice of his correspondents had been to examine at 2, 4, 6, 12, 24, and 36 hours. He concluded by moving that a committee of the section be appointed to deal with the subject, to which Dr. Hertz should belong, owing to the amount of work he had done on the matter.

Dr. A. F. HERTZ sent a communication which was read by the Secretary. In it he said that large doses of bismuth subnitrate ought never to be employed for X ray examinations, as that salt might cause severe poisoning. On several occasions such poisoning had ended fatally. Neither was bismuth carbonate a suitable preparation for these investigations; it had a depressing effect on gastric peristalsis. Bismuth oxychloride was the only salt of bismuth which was chemically inert in the stomach. Barium sulphate had been proved to be as efficacious as bismuth in rendering stomach and intestines visible to X ray examination. Owing to distortion caused by large doses of a heavy salt the aim should be to secure the smallest dose which would give a clear view of the organ. He was in the habit of using 2 oz. of barium sulphate, though that must be increased for adipose patients. The total meal without the barium was 4 oz. It was most important that the meal should be palatable and well made. Only after the colon had been properly emptied could the activity of the whole tract be properly investigated. Aperients should be discontinued for at least 48 hours before the first examination. Each morning the patient should try to evacuate the bowels naturally, and he should continue his ordinary diet, so that the normal condition of his alimentary tract could be investigated. In cases of severe constipation it was sometime necessary for the examination to extend over five consecutive days.

A number of members discussed the subject and detailed their own practice.

At the conclusion of the meeting the following were appointed to constitute a committee on the subject: Dr. Hertz, Dr. Morton, Mr. S. Gilbert Scott, Dr. A. E. Barclay, and Dr. A. C. Jordan, with power to add to their number. Dr. Morton was chosen convener.

## SUBSECTION OF ORTHOPÆDICS.

### *Presidential Address.*

A MEETING of this subsection was held on Nov. 4th, Mr. E. MUIRHEAD LITTLE, the President, being in the chair.

After welcoming his hearers to this the first scientific meeting of the newly established subsection, which might have existed from the beginning had the British Orthopædic Society, founded in 1894, survived until the formation of the Royal Society of Medicine, the PRESIDENT said that the history of orthopædics could be divided into three periods—namely: (1) the pre-operative, before Stromeyer; (2) the subcutaneous, from Stromeyer to Lister; and (3) the present period of free operation by open and subcutaneous methods. In the seventeenth century, although the name of this specialty had not been invented, there was a very flourishing orthopædist at Utrecht, in Holland, one Skatt, or Schacht, or Scott, who had a large practice in the treatment of crooked limbs and backs. One of his patients was Edmund Verney the younger, an account of whose case and of Skatt's treatment would be found in the Verney Memoirs. But it was to Dr. Nicholas Andry, professor of medicine in the Royal College and senior dean of the Faculty of Physick at Paris, that we owed the title of this branch of surgery, for in 1741 he published "Orthopædia, or the Art of Correcting and Preventing Deformities in Children by such Means as may Easily be put in Practice by Parents themselves and all such like as are Employed in Educating Children." An English translation of the book appeared in London in 1743. In the preface the author wrote: "As to the title, I have formed it of two Greek words—viz., ὀρθός, which signifies straight, free from deformity; and παιδίον, child." He had much to say about two previous works by other authors, from one of which he got the idea of its title. This was the Callipædia of 1656, a Latin poem by the Abbé Claude Quillet, on the art of getting beautiful children. Quillet (who himself was deformed) denounced marriages of interest, and his views foreshadowed the eugenics of to-day, despite some absurd theories. The other work, "The Pædotrophia," was also in Latin verse, on the manner of bringing up and nourishing young children. The author was Scevole de Sainte-Marthe, and his book, published in 1584, went through ten editions in his lifetime and as many after his death, and "was translated into a great many languages and even into French verse." Andry's book, the President said, was a popular one. Hardly any apparatus was mentioned in it, and technical terms and the reproductive organs were avoided. While he showed evidence of strong common sense, he was not beyond his times in a belief in many useless preparations, and he relied on gentle intermittent pressure and supposed emollient applications without operation or apparatus to cure structural deformities such as wry-neck. Rickets was to be cured by a fern-leaf bed, by causing violent muscular movements, by cold affusion, and in some cases by tickling the soles of the feet. Wounds of the shoulder, he said, caused "loss of volubility of the tongue because the hyoid bone was connected with the shoulder by a muscle" (the omohyoid?). But one need not be hard upon Andry because of his limitations. He was a physician, not a surgeon, and was careful to avoid what he described as the province of the surgeon. Not much was known, the President continued, of the mechanical orthopædists of the eighteenth century. Notable among them in this country was Robert Chessher, referred to by George Eliot in "Middlemarch." He was a surgeon of good repute and great ingenuity, who was born at Hinckley in 1750, and after being house surgeon to the Middlesex Hospital practised in his native place. He invented the double inclined plane for fractures in the lower extremities, and many other appliances for deformities and injuries, so that "Mr. Chesser and his irons" became famous. He seems to have been a modest and retiring man, who did not publish anything, and little is known of his methods. He died, aged 80, in 1831, just before the discovery of subcutaneous surgery. Another name which has survived is that of Timothy Sheldrake, "of the Strand, truss-maker to the East India Company and the Westminster Hospital," who between 1783 and 1806 published several medical pamphlets on distortion of the spine, club-foot, and rupture. He was, however, of a class very different from Chesser's, and of that type of advertising tradesman which is always with us. But to such, until Stromeyer's time, the care of deformities was mostly relegated. The names and work of the workers who followed in Stromeyer's footsteps were familiar. When Lister had rendered open operations safe and nearly painless, the scope of orthopædic surgery widened vastly, and new and daring methods of treating deformities became feasible. This progress was still going on, and if in some procedures the risk to the patient seemed to outweigh the prospect of improvement such experiments increased one's knowledge and led to further advance. In the hospitals of the United States there was a tendency to enlarge the list of affections to be referred to the orthopædic surgeon. Some vexed questions concerning the subjects selected for discussion by the Council of the Orthopædic Subsection of the International Congress of Medicine this summer were by no means there fully answered. The true value of arthroplasty, of certain methods of treating scoliosis, Pott's disease, and spastic paraplegia remained still to be established, and they might look forward to much useful work being done in regard thereto by this subsection. Personally, he hoped that the meetings of the subsection would be largely clinical, for they were all apt to find themselves forced to work in closed compartments, and this subsection should be able to break down some of the partitions by encouraging the exhibition of actual results. An important part of orthopædic work related to curative, retentive, and supporting appliances, and the relations between the orthopædic surgeon and the manufacture and supply of instruments to his patients might be usefully considered. The question held difficulties, but it should not be shirked.

# MEDICAL SOCIETY OF LONDON.

*Exhibition of Clinical Cases.*

A MEETING of this society was held on Nov. 24th, Sir DAVID FERRIER, the President, being in the chair.

Dr. JOHN GAY showed a case of Hæmorrhage from Both Breasts in an unmarried woman, aged 35 years, who had always had good health till her present illness. She had had no serious illness since a child, but had suffered from epistaxis from time to time; menstruation had always been considerable in quantity but regular. She had never suffered from any excessive hæmorrhage after cuts or tooth extractions. Her father died as the result of an accident. Her mother had died at the age of 30 from "some hæmorrhage." She had neither brothers nor sisters. The present condition commenced about March, 1912. She had had quite severe hæmorrhages from one or both breasts, often saturating her clothes and the thick pads placed for their protection. It occurred quite irregularly and had lasted on and off for two or three months at a time. There had been none since September, 1913. The menstrual periods were usually regular, but during this condition of bleeding she had missed two months. The periods were now regular again. Also, the epistaxis had not occurred since the occurrences of the bleedings. There appeared to be no disease of the uterus, ovarian, or other organs. The urine was normal. A blood count gave the following: Polymorphonuclears, 52 per cent.; lymphocytes, 44 per cent.; eosinophiles, 2 per cent.; large mononuclears, 2 per cent. No abnormal red or white cells were seen in counting 250 leucocytes. Calcium lactate and chloride had no effect. Turpentine and sea air caused some improvement.

Dr. ROBERT HUTCHISON showed a case of Hypertrophic Biliary Cirrhosis with Splenomegaly. The patient, a girl aged 4½ years, was admitted on Sept. 2nd, 1913. She was an eight months' child and always delicate. When 14 days old she became jaundiced; this lasted a month. Two days before she was exhibited she became very "yellow" and had frequent pale stools. There was no history of alcoholism. Both parents were alive and healthy. There were four other children, three dead (pneumonia; appendicitis; diarrhœa) and one (a baby) healthy. None had had jaundice. No miscarriages had occurred. She was a fairly nourished, rather stunted child, with marked icterus, and venous stigmata were present on the face. The liver was three fingers' breadth below the costal margin and was smooth and firm. The spleen reached half way to the umbilicus. There was no ascites. The thoracic organs were normal. The fingers and toes were clubbed. The urine contained bile pigment. Blood: red cells, 5,300,000. Hæmoglobin, 75 per cent. Colour index, 0·7. White cells, 4800. The differential count was normal. Fragility of the red cells was not increased. The patient's serum had no hæmolytic power on normal red cells. The Wassermann reaction was negative in both the patient's serum and that of her mother.

Dr. J. L. BUNCH showed a case of Papulo-necrotic Tuberculide. The patient, a boy aged 13, had attended Dr. Bunch's department at the Queen's Hospital for Children for the past six years. He first developed a skin eruption at the age of 4, which began as a single red patch near the navel, on which small red nodules showed themselves later. The nodules were slightly raised, somewhat papular in character, and distinctly infiltrated, but small and apparently quite superficial. They were always succeeded by a shallow scar about ¼ to ⅓ in. in diameter. In 1906 there were about 30 of such scars round the umbilicus, and the skin of this area was dry, scaly, and red, and covered with a fine desquamation. On the inner sides of the thighs and for some distance round each axilla was a circumscribed, irregular, superficial pinkish dermatitis, with a similar fine scaliness on the surface. During the past six years the areas which formerly only showed a superficial dermatitis had become covered with a number of small, shallow, atrophic scars, similar to those round the umbilicus, and these latter had persisted. Still more atrophic lesions had also made their appearance on the skin of the abdomen, so that there was a very large number of such scars—so many that they had not been counted. The disease was progressive, for fresh lesions kept on showing themselves, but since the patient had had regular treatment with tuberculin they were less numerous and less marked. It was not easy to be sure that the scars were always preceded by papular, tuberculous lesions, but such papules had frequently been found while the boy had been under the care of Dr. Bunch. The atrophic scarring in any case seemed to be more defined and more extensive than the small papular lesions would have led one to expect. It appeared certain that before any fresh area showed any signs of papules or scars it was for some long period previously invaded by a characteristic, scaly dermatitis, and there was now a very well-marked patch of such a character on the right shoulder, which probably heralded the appearance of the atrophic tuberculide within the next few months. Microscopic examination of an excised papule showed some congestion of the papillary and subpapillary vessels, with marked infiltration of small round cells about the glands and vessels in the hypodermic tissues and the gland-ducts in the corium. Giant-cells were present, but no tubercle bacilli could be demonstrated. In 1906 the boy was an in-patient at the Queen's Hospital for Children for six weeks, and was given a course of small tuberculin injections. These, however, failed to arrest the disease, and, in fact, some tuberculous lesions subsequently made their appearance at, or quite near to, the sites of some of the injections. Recently the patient had had two courses of tuberculin treatment, this time using Rosenbach's tuberculin, with an interval of five weeks between the two courses. The injections were given at weekly intervals, commencing with an initial dose of 0·01 c.c., and gradually increasing it up to 0·75 c.c. These doses were considerably smaller than those recommended by Rosenbach himself, but even the larger dose in this case was followed by a rather excessive reaction. Some of the erythematous skin area had been X-rayed in order to determine whether such treatment would prevent the subsequent development on these areas of the necrotic papular tuberculide, but it was still too early to say whether this would be the case.

Dr. BUNCH also showed a case of Linear Lichen Planus developed on the site of an injury. The patient was aged 27, and some four months previously a few spots appeared on the right elbow, which gradually coalesced to form a somewhat purplish patch, with a slightly scaly surface. This patch was at one time thought to be psoriasis. Later on the patient had developed some papules on the nape of her neck and on the front of the right wrist, which gradually increased in number and extent until she had several localised patches slightly raised above the surface and of a reddish tint. Some six weeks before, she had scratched the anterior surface of her left forearm with a dust-pan and on the site of this scratch a line of typical lichen planus papules developed. When first seen, three weeks ago, these papules showed an irregular outline, with a flat, shiny surface, with, in some instances, a tendency to a slight central scaliness. They were still present, but were not quite so bright in colour as they had been. During the last three weeks the patches on the right wrist had lost much of their purplish tint and had become rather a dusky brown. The lesion on the right elbow was still scaly and had some resemblance to a patch of psoriasis. Some lichen planus lesions on the buccal mucous membrane had disappeared under treatment. Having regard to the generally accepted view that lichen planus was not contagious and that fresh lesions did not appear as the result of inoculation, Dr. Bunch thought that some interest was attached to the fact that the linear patch on the left forearm developed exactly in the position of the scratch mark already described.

Dr. REGINALD C. JEWESBURY showed a boy, aged 5 years, who for a period of nine months had suffered from a Right-sided Pneumothorax which for all that time had been under great pressure and at no time had any effusion been present. The mode of onset was not known and it was first discovered when he was brought up to hospital for dyspnœa which had developed since his recovery from an attack of scarlet fever. The chest was aspirated on one occasion and air escaped under great pressure, but the condition did not improve after this. The affected lung had quite lately become fully expanded within a period of 14 days and the chest presented no abnormal physical signs and the boy was quite well. The patient was shown at a previous meeting of the society when the pneumothorax was present. Radiograms were shown demonstrating the pneumothorax and the condition of the chest since recovery. The main points of interest in the

case were first of all the age of the patient (5 years), for this condition was very rare in children; secondly, the fact that no effusion occurred whatever; and, thirdly, apparently complete recovery of the lung which had been completely collapsed for so long a time. The cause was uncertain, but probably due to some small tuberculous focus in the lung which had healed.

Dr. S. A. KINNIER WILSON showed a case of Bilateral Cervical Ribs to illustrate the diagnosis between that condition and progressive muscular atrophy. The patient presented the characteristic wasting in the thenar eminence, which, he said, was almost pathognomonic of the condition. The wasting was confined to the abductor pollicis, opponens pollicis, and part of the flexor brevis pollicis. In progressive muscular atrophy the wasting was a global one—i.e., it involved the eminence as a whole; and the contrast between the wasted and non-wasted parts was never seen in that disease as it was in cases of cervical rib.

## LIVERPOOL MEDICAL INSTITUTION.

*"Lane Kink."—Appendix Abscess.—Influences of the Venereal Diseases.*

A MEETING of this institution was held on Nov. 20th, Mr. ROBERT JONES, the President, being in the chair.

Mr. F. A. G. JEANS read a note on the "Lane Kink." He could not agree with the theory that this condition was due to the upright position. He had never met with it except in association with appendicitis. Where the ileum was kinked he had found that division of the band of adhesion released the ileum, and the lozenge-shaped space so formed was sutured, and reformation of the band was prevented by getting the bowels moved early and keeping them released.—Mr. F. T. PAUL agreed with Mr. Jeans's view of the causation of the kink, and considered there was no warrant for extensive operations such as had been recommended.

Mr. G. P. NEWBOLT read a note on a case of Appendix Abscess in which there were continued rigors and high temperatures for some weeks after the abscess had been drained and washed out. A vaccine had been made, the discharge having been found to contain an enterococcus which could not be identified. The patient made a complete recovery, which Mr. Newbolt had no doubt was due to the vaccine.

Dr. C. J. MACALISTER read a paper on Influences of the Venereal Diseases. He spoke of the power exerted by public opinion, citing the changes that have taken place as to the use of alcohol, as to the housing of the poor, and the use of the individual cup by some Nonconformist bodies in their Communion service. He went on to speak of the part that Dr. W. Carter and Dr. Birkbeck Nevins, both past presidents of the society, had taken in the repeal of the Contagious Diseases Acts in 1886. It was proved that these Acts did not lessen the evils they were supposed to remedy. At the same time, they caused a lessened sense of responsibility from Government recognition of immorality. Dr. Macalister thought that other countries would follow the lead of England in giving up such regulative systems. Army statistics showed that when these regulations were rescinded there was a progressive decrease in disease. Education was making the soldier more moral and temperate. With regard to the general population, it seemed evident that no substantial decrease in the disease was occurring, and a growing number of diseases which were not formerly considered to be syphilitic in origin were now definitely proved to be due to that infection. Dr. Macalister alluded to the fact that proofs were forthcoming that there were occult forms of syphilis, that the results of the infection were far more widespread than was imagined, and that a considerable number of diseases which were not previously known to be associated with syphilis were due to it, as in some cases of mental deficiency and of epilepsy. Again, it had been shown that congenital heart disease, some gynæcological conditions, many diplegias, and cases of paralysis were due to syphilis. Dr. Macalister was with Dr. F. Wilson investigating cases of fibroid bronchiectasis and finding the spirochæta. General paralysis of the insane had been proved to be syphilitic in origin. Gonorrhœa had been proved to be one of the gravest dangers to which womanhood was subjected. Dr. Macalister appealed to the medical profession as a whole to lend all their influence to educating the public, so that they could understand how these diseases not only brought trouble to individuals, but were interfering with labour, were costing money in the provision for the suffering patients rendered unfit to earn a livelihood, and causing deterioration of the race. He pointed out the difficulties of notification until the public had been sufficiently educated. When that had been effected they could go on to the effective segregation of carriers, certification as to fitness for marriage, and other measures for stamping out the plague.—In the discussion that followed Dr. E. W. HOPE said that the history of the Contagious Diseases Acts taught them what to avoid, and he thought that in order to give practical and effective assistance in curing the evil the institution should render every help to the Royal Commission. He proposed that a small committee of the institution should be formed to go into the different points and consider how best to assist the Royal Commission.—It was agreed that a committee should be formed with power to add to its numbers. The names proposed were Mr. Robert Jones, Dr. A. Stookes (the secretary), Dr. Macalister, Dr. Hope, Dr. R. J. M. Buchanan, Dr. J. E. Nevins, Dr. F. H. Barendt, Dr. R. W. MacKenna, Professor J. M. Beattie, and Dr. Frances Ivens.

## MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

*Electrolytic Chlorine Bleach for Asylum Laundries.—Asylum Dysentery.*

THE quarterly meeting of this association was held at the Medical Society's Rooms, Chandos-street, London, W., on Nov. 25th, Dr. JAMES CHAMBERS, the President, being in the chair.

The PRESIDENT, referring to the death of Sir John Batty Tuke, said that the association esteemed him as one of the earliest energetic workers along scientific lines, while in Parliament he had always been an earnest advocate of the profession's just claims. A message of condolence and sympathy was sent to his family.

Dr. J. G. SOUTAR proposed:

That it is the opinion of this general meeting of the Medico-Psychological Association of Great Britain and Ireland that the asylum visiting committees of the county and borough councils and the asylum boards of Lancashire and Yorkshire, with such additions as the Act requires, be the committees for the local administration of the Mental Deficiency Act, but that the existing visiting committees should retain their statutory powers under the Lunacy Act.

The motion, which was seconded by Mr. H. WOLSELEY LEWIS, was carried, and copies of the resolution were ordered to be sent to the Secretary of State for the Home Department, the Secretary of the Board of Control under the Act, the chairmen and clerks to visiting committees, to the medical superintendents of each county, city, and borough asylum in England and Wales, and to the chairman and secretary of each county council in England and Wales.—Dr. BEDFORD PIERCE, referring to the fact that the Association had been invited to send representatives to a conference summoned by the Durham county council to consider various matters affecting assistant medical officers of asylums, submitted to the general meeting, on behalf of the Council, a resolution authorising the committee appointed to consider the status of psychiatry to place before the proposed conference, or any committee appointed by it, all information in its possession, and to offer all possible aid, to submit evidence, personal or otherwise.—Dr. SOUTAR seconded the motion, which was unanimously agreed to.

Mr. E. FAULKS, of Bexley Asylum, read a paper on an Electrolytic Chlorine Bleach for Asylum Laundries, which was claimed to produce satisfactory cleansing, disinfection, and deodorisation, with a minimum of injury to material and a definite economy of soap and labour. For the removal of intractable stains and the sterilisation of such clothing as was dangerously infected a 2 per cent. strength was employed. The carbolic coefficient of the bleach was 21, giving a germicidal power equal to a carbolic solution of 1 in 20. He had conducted several tests with bacillus coli, bacillus typhosus, staphylococci and streptococci, the results of which proved very satisfactory. In the dregs of the washer when no chlorine was used there

were 150,000 organisms per c.c. averaged from a series of 18 plates; while following the chlorine treatment only four colonies were found, proving that the dregs by this process were practically sterile. It was also very efficacious in removing stains caused by blood, fæces, and menstrual secretion, and in table linen those made by cocoa. The tensile strength of the material so treated was not altered, and he declared the process had the three important advantages of economy, utility, and safety.—The paper was discussed by Mr. T. J. O'C. DONELAN, Dr. J. SHAW BOLTON, and Dr. W. F. MENZIES, the latter stating that the use of chlorine slowly deteriorated the fabric.—Mr. FAULKS briefly replied.

Mr. FAULKS also described and demonstrated an Automatic Temperature Regulator, for use when a prolonged hot bath was required. Any intelligent nurse could use it without fear of either scalding or chilling the patient in the bath. The chief part of the mechanism was a sensitive capsule, the expansion of which depressed a lever, which in turn forced down a valve, this valve being kept open by the inflow of the hot water.

Dr. SYDNEY COUPLAND, in resuming the discussion on the paper on Asylum Dysentery by Mr. H. S. Gettings, said that the paper, which gave the records of an institution over a period of nearly a century, was unique. During the seven years he was doing post-mortem examinations at Middlesex Hospital he saw only two cases, in one of which the disease was contracted in India. Since his student days there had been in that hospital on the average only one case a year. It seemed to be the same disease as that named colitis among the general population. He referred to a discussion on the subject initiated by Dr. F. W. Mott at the Epidemiological Society in 1901, when Colonel Kenneth McLeod, who in his earlier life had been attached to Durham Asylum, showed that the prevalence of the disease had often been traced to sewage contamination. The prevalence of dysentery in asylums was not of itself sufficient reason to condemn the sanitary condition of those institutions, and the Commissioners in 1902 established a register of dysentery and diarrhœa. He gave an exhaustive criticism of the whole matter by the aid of a number of diagrams which were distributed, and concluded by saying that in the conditions obtaining, with a population concentrated in asylums, it should be possible by making a close study of the disease, greatly to minimise, if not obviate, epidemics in the future.—Dr. ROBERT ARMSTRONG-JONES detailed the measures of segregation practised at Claybury Asylum to prevent outbreaks of the disease and the careful watch kept upon patients whose functions were irregular. He had been glad to find the disease called by its proper name by Mr. Gettings, and hoped Dr. Coupland's tables would be incorporated in the Journal, so that they could be studied by officers of all asylums.—Dr. BOLTON explained how some cases of dysentery in the past had been overlooked, and referred to his efforts to detect and check carriers of the disease, and to examine the stools bacteriologically. He spoke of the various improvements effected at Wakefield Asylum when certain defects were blamed for the prevalence of the disease. No matter what requirements were laid down, he felt sure that only medical officers of great enthusiasm would examine stools systematically. He hoped that a method would soon be available for diagnosing the presence of the disease in an individual, as was now possible with syphilis and typhoid fever.—Mr. GETTINGS, in reply, said that to find the infecting organism was simple; the difficulty was to detect the chronic carriers.

## LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

*Myeloid Sarcoma.—Exhibition of Cases and Specimens.*

A MEETING of this society was held on Nov. 21st, Dr. T. WARDROP GRIFFITH, the President, being in the chair.

Dr. M. J. STEWART read a paper entitled "Observations on Myeloid Sarcoma, with an Analysis of 50 Cases." The purpose of the communication was, he said, to emphasise the importance of clearly differentiating true myeloid sarcoma from malignant giant-cell sarcoma, to advocate conservative treatment of such cases, and to indicate the histological criteria by which the microscopic diagnosis may be made. The paper was based on an analysis of all the cases of myeloid sarcoma, 50 in number, treated at the Leeds General Infirmary during the years 1899 to 1912 inclusive. These were investigated from both the clinical and the pathological standpoint, but special attention was paid, on the one hand, to the question of prognosis, and on the other to the minute anatomy of the growths. Forty cases were successfully traced, and of these 38 were alive at the time of writing, after periods varying from 1 to 14 years from the time of operation. Of the two patients dead one (a jaw case) was the subject of some obscure bone affection, while the other (a femur case) had refused operation and lived for five years after the exploratory incision. In neither case was there any evidence of dissemination. As a contrast to the myeloid series, five examples of malignant giant-cell sarcoma were investigated, in every one of which death with lung dissemination took place in from six months to three years from the time of operation. The histological diagnosis was based on the morphological characters of the giant cells, especially as regards their nuclei. In myeloid sarcoma the latter were numerous, uniform, small, and without mitoses; in malignant giant-cell sarcoma they were few, sometimes single, irregular, and often very large, while mitotic figures were frequent The chief practical deduction from the series of cases under review was that conservative treatment should have a thorough trial, in suitable cases, in the first instance, and that amputation should only be resorted to after the failure of less radical measures.

Mr. WALTER THOMPSON showed a boy on whom Splenectomy had been performed for rupture of the spleen 48 hours after the accident. Fourteen days after the operation the only noticeable change in the blood was a marked increase in the eosinophiles.

Mr. J. F. DOBSON showed a man, aged 45, who was admitted to the infirmary in August, 1912, with Complete Intestinal Obstruction. A cæcostomy was performed, and on Sept. 17th of that year a large growth was removed from the transverse colon. A secondary nodule of growth, the size of a pigeon's egg, was found close to the free margin of the right lobe of the liver. A wedge of the liver containing this secondary growth was removed. No other secondary deposits were detected. The patient recovered satisfactorily and was able to resume work in February, 1913, and returned a few weeks ago for closure of the cæcostomy opening. At the present time he weighs 4 lb. more than he did two years ago, and his general health is perfectly good. Microscopically both primary and secondary growths showed the characters of adeno-carcinoma.

Dr. L. A. ROWDEN gave a demonstration of Radiographs of Renal and Ureteral Calculi and of Calcified Mesenteric Glands.

Cases and specimens were also shown by Mr. E. W. BAIN, Dr. R. A. VEALE, Mr. L. R. BRAITHWAITE, Dr. G. W. WATSON, and Dr. C. W. VINING.

## SCOTTISH OTOLOGICAL AND LARYNGOLOGICAL SOCIETY.

*The Use of Vaseline in the Radical Mastoid Operation.—Respiratory Stoppage under General Anæsthesia.—A Method of Inducing Fibrosis of Tissues of Inferior Turbinates in Vasomotor and Hypertrophic Rhinitis.—Otosclerosis.—Pathological Anatomy of Ear Disease.—Etiological Relationship of Faucial Tonsils to Tuberculous Cervical Adenitis affecting Children.—Paralysis of Palate.—Exhibition of Cases.*

A MEETING of this society was held in the Royal Infirmary, Edinburgh, on Nov. 22nd, Dr. J. D. LITHGOW being in the chair.

Dr. LITHGOW contributed the following communications: 1. On the Use of Vaseline, Plain Sterile and Medicated, in connexion with the Packing of the Wound in the Radical Mastoid Operation, claiming for this method that the first dressing is thereby rendered painless. 2. The Mechanism of one form of Respiratory Stoppage under General Anæsthesia, chloride of ethyl being the anæsthetic used in the cases investigated, though he was of opinion that his observations held good when other general anæsthetics were employed. He found that in certain cases the laryngeal surface of the epiglottis was firmly fixed

by a sucker-like action to the posterior pharyngeal wall. The action could only be overcome by inserting the finger between the epiglottis and the pharyngeal wall. 3. (In conjunction with Mr. L. C. PEEL RITCHIE.) A Method of Inducing Fibrosis of the Tissues of the Inferior Turbinates in cases of Vasomotor and Hypertrophic Rhinitis. This method, which has been used in the treatment of hæmorrhoids and small simple tumours, consists of the injection into the soft parts of the turbinates of a 60 per cent. solution of carbolic acid in glycerine.

Dr. J. S. FRASER and Dr. GIDEON WALKER contributed a preliminary paper on a Clinical Investigation of Otosclerosis. The investigation inquires into the following points: (1) the tone at which Rinne's test becomes positive; (2) the presence or absence of sensibility for tickling in the external meatus; (3) the presence or absence of vestibular symptoms; (4) the rapidity of the reaction to cold syringing; (5) Gelle's test; (6) the upper tone limit with the monochord; (7) the family history; and (8) the general medical examination of the patient for rheumatism, gout, disorders of menstruation, and so on.

Dr. FRASER gave an instructive epidiascopic demonstration of the Pathological Anatomy of Some Cases of Ear Disease, and showed two patients on whom he had operated for middle-ear suppuration with labyrinth symptoms. In both the labyrinth phenomena were somewhat anomalous. In one the caloric reactions and the pointing test gave varying results at different periods. No fistula symptom was obtained, and on performing the simple Schwartze operation no fistula was found. The tympanic cavity was not interfered with and the hearing returned to normal, and the labyrinth phenomena and nystagmus disappeared. In the other case no fistula symptom was obtained, but on the performance of the radical mastoid operation a fistula of the horizontal canal was found. The labyrinth was not opened, and the patient made a good recovery.

Dr. A. PHILP MITCHELL contributed a paper on the Etiological Relationship of the Faucial Tonsils to Tuberculous Cervical Adenitis affecting Children. Of 64 consecutive cases of children suffering from tuberculous disease of the upper cervical glands 24 showed histological evidence of tuberculosis of the tonsils. Inoculation of guinea-pigs from these cases yielded positive results in 19, and of these the bovine bacillus was present in 12, and the human in 3 cases. Of hypertrophied tonsils from 90 children who showed no clinical evidence of tuberculous gland disease, those of 6 gave histological evidence of tuberculosis, and 9 yielded positive results on inoculation.

Dr. A. LOGAN TURNER gave notes of a case of a child on whom Enucleation of the Tonsils and Removal of Adenoids had been performed two years previously, since which time symptoms of Paralysis of the Palate had at times been observed.

The following cases and specimens were exhibited:—

Dr. LITHGOW: (1) A patient operated on for Double Frontal Sinusitis; and (2) (with Mr. PEEL RITCHIE) two patients operated on for Malignant Disease affecting the Buccal Pharynx and Laryngo-pharynx.

Dr. W. T. GARDINER: A patient with Chronic Subglottic Infiltration which was thought to be syphilitic, though in the subsequent discussion much diversity of opinion was expressed as to its nature, and the exhibitor was asked to remove a portion for microscopical examination and to report at a future meeting.

Mr. W. G. PORTER: 1. A patient on whom he had operated for a Right Temporo-sphenoidal Abscess due to chronic middle-ear suppuration. The functions of the ear, both auditory and static, were gone, and on operation the dura of the middle fossa was found to be exposed and covered with granulations. The pus from the abscess gave a streptococcus in pure culture. 2. A case where a halfpenny had been retained in the œsophagus of a child for eight years. 3. A very interesting case of Post-operative Osteomyelitis.

Dr. J. K. MILNE DICKIE: 1. A patient suffering from Hoarseness dating from birth. There was an irregular thickening of the left vocal cord, the nature of which it was difficult to determine. 2. An interesting case of Laryngeal Stridor. The patient, a woman of 43, suffered from asthma and bronchitis. Laryngeal stridor developed and on examination it was found that the right cord could be abducted only slightly and the left one not at all. The laryngeal obstruction became severe and tracheotomy had to be hurriedly performed. A few days later the cords could move quite freely. In the discussion which followed it was suggested that an acute enlargement of the bronchial glands had developed in association with the bronchitis, and that this had caused irritation of the recurrent nerves and adductor spasm.

Dr. LOGAN TURNER: 1. A patient, a girl 7 years of age, who had recovered from Post-operative Meningitis. The child suffered from chronic middle-ear suppuration. On the performance of the radical mastoid operation a polypus was removed from the region of the round window. The next day symptoms of meningitis appeared. On lumbar puncture the cerebro-spinal fluid was found to be cloudy, faintly acid, containing albumin, and reduced Fehling solution incompletely. There was no growth on culture. A double vestibulotomy was performed and the internal auditory meatus opened into, and translabyrinthine drainage established. Lumbar puncture was performed on five occasions, and urotropin in 10 grain doses injected into the canal. 2. A rare case of Hyperplasia of the Mucous Membrane of the Uvula, Soft Palate, Pharynx, and Larynx. 3. A case of Multiple Telangiectases of the Skin of the Face and the Mucous Membrane of the Nose and Mouth. 4. Two cases of Sarcoma of the Tonsil operated on a year ago without recurrence. 5. A patient on whom Mr. Wallace had operated three years ago for Malignant Disease of the Upper End of the Œsophagus, and in whom no recurrence has taken place.

Dr. J. WALKER DOWNIE: Two very good specimens of Calculus of the Tonsil; the cases from which they were removed were described.

A noteworthy feature of the meeting was the museum, in which were shown specimens, microscopic slides, models, X ray photographs, instruments, sketches and paintings, contributed by a number of members of the society.

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## ROYAL ACADEMY OF MEDICINE IN IRELAND.

### SECTION OF PATHOLOGY.

*Exhibition of Specimens.—Three Fatal Cases of Pharyngitis.*

A MEETING of this section was held on Nov. 14th, Dr. J. B. COLEMAN, C.M.G., the President, being in the chair.

Dr. A. R. PARSONS showed a specimen of Spontaneous Rupture of the Heart. The patient first came to him complaining of flatulence and jagging pains in his right hypochondrium. The patient's mother died from "burst aneurysm of the heart." The patient was engaged in hard manual labour. Physical examination showed nothing abnormal, nor did the urine contain any abnormal constituent. Examination after a bismuth meal discovered nothing abnormal. A second examination of the stomach contents gave a positive reaction for blood, but no trace of free hydrochloric acid. Two months later the flatulence was as bad as ever, and food had to be taken every two hours in order to produce moderate comfort. He was gradually increasing in weight, and would not consent to operation, as he insisted that his heart would not stand it. One day, three months later, he became acutely ill, and stomach trouble, possibly perforation, was suspected: but physical examination negatived perforation or peritonitis. The patient died shortly afterwards quite suddenly. Dr. Parsons said his diagnosis had been some form of ulceration, although it could not be overlooked that the patient had gained in weight. The pain he regarded as most likely anginal. Post mortem, on opening the pericardium fluid blood at once escaped. The stomach was quite small, and there was no evidence of gastrectasis, but along the lesser curvature was a hard mass suggestive of malignant disease, but no enlargement of the glands was discovered. It was evident that death was due to rupture of the heart. Two points which impressed him were: first, that hunger pain is not pathognomonic of duodenal ulcer, and second, that steady and progressive increase in weight is not incompatible with malignant disease of the stomach.—Professor A. C. O'SULLIVAN said the heart showed a rupture, which apparently ran along the anterior wall of the right ventricle close to the septum, and about three-quarters of an inch long.

Both ventricles appeared to be ruptured There was extreme fatty infiltration and diffuse fatty degeneration of the heart muscle. The stomach contained a raised mass running from one curvature to the other, which caused thickening of a large area of the stomach wall. There was no ulceration anywhere. The cancer was of a rather unusual type—small round-celled.—The PRESIDENT said the condition was a very rare one indeed. He recalled a specimen of rupture of the heart shown by him before the section some 17 years ago. The condition always appeared to be due to fatty degeneration of the heart muscle.—Professor A. H. WHITE referred to three cases in the College museum, in each of which the rupture was due to a localised degeneration of the coronary artery or a branch.

Mr. T. T. O'FARRELL brought forward a specimen of Favus to draw attention to the technique of fixing and staining the hairs for spores and mycelial threads in cases of ringworm and favus. He used a Gram-Weigert method, and placed the various solutions in successive drops on a white tile. This simplified the process and rendered the recovery of the hairs an easy matter. The results were excellent.

Mr. O'FARRELL also showed a specimen of Glioma of the Fourth Ventricle from a male patient aged 24. Up to five weeks previous to being seen he was in good health. When stooping he was inclined to fall forward. Romberg's sign was present. Pulse and respirations were normal; temperature subnormal. When walking to hospital a week later he fainted. His pulse was weak, but he spoke clearly. About 12 hours after admission his speech thickened and he became stupid. He complained of headache, and his face dropped on the left side. The paralysis extended, and he died five hours later. At the post-mortem examination no hæmorrhage could be found until what appeared to be a large clot was discovered in the fourth ventricle. The conclusion was formed that it was a hæmorrhage into a tumour. Sections showed it to be undoubtedly a glioma. The position was of interest.—The PRESIDENT said it was obvious that an exact clinical diagnosis would have been extremely difficult, as the patient was able to walk about up to a comparatively short time before death.

Dr. W. BOXWELL read a note on Three Cases of Fatal Pharyngitis which had occurred during the scarlet fever epidemic last September.

Dr. BOXWELL also showed (1) a specimen of Organic Obstructive Dilatation of the Stomach due to a small scirrhous cancer of the head of the pancreas, causing partial obstruction of the duodenum; and (2) a specimen of an Atrophic Pancreas due to obstruction of the duct by numerous calculi of calcium phosphate and carbonate. The duct was widely dilated and the gland fibrous.

NORTH OF ENGLAND OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.—A meeting of this society was held in Sheffield on Nov. 21st, Dr. W. E. Fothergill (Manchester), the President, being in the chair.—Mr. Miles H. Phillips (Sheffield) showed a case of Peritoneal Implantation of the Ovum. The patient was operated upon for ectopic pregnancy and a bleeding tube removed. A small nodule was noticed under the peritoneum of the pelvic wall and was excised. This proved to be an ovum covered by peritoneum, except in one spot.—Mr. W. W. King (Sheffield) read a paper on the Serum Diagnosis of Pregnancy in which he described his technique and gave his results of the examination of 50 cases. Twenty-five pregnant patients all gave positive reactions; 5 others in whom the clinical diagnosis of pregnancy was uncertain also gave positive results. Two recent septic abortions were negative. Out of 18 non-pregnant patients, two sera digested placental albumin. His results of the question of the specific character of the ferments showed that the serum of pregnant patients would in some cases digest carcinomatous tissue and *vice versâ*.—Mr. Phillips also showed specimens of Parasitic Ovarian Dermoid and Papillary Ovarian Tumour.—Mr. FAVELL (Sheffield) showed a specimen of Large Fibromyoma of the Vaginal Wall.—Mr. D. Gray Newton (Sheffield) showed a specimen of Tumour of the Vulva.

BRISTOL MEDICO-CHIRURGICAL SOCIETY.—A meeting of this society was held on Nov. 12th, Dr. P. Watson-Williams being in the chair.—Mr. F. E. Shipway demonstrated an apparatus for the Intratracheal Insufflation of Ether, and pointed out that the advantages of the method, in addition to the prevention of collapse of the lung, were the prevention of the aspiration of blood from the pharynx and the very slight amount of respiratory movement.—Mr. W. S. V. Stock stated that deaths had occurred in this method from employing too high a pressure, and he demonstrated a combined safety-valve and manometer which he had constructed to obviate this risk.—Mr. E. W. Hey Groves showed a simplified apparatus operated by a foot bellows instead of by a motor pump.—Dr. Watson-Williams had found that this method obviated any risk of the entry of blood into the lower respiratory tract during nasal and pharyngeal operations.—Dr. J. A. Nixon read notes on a case of Splenectomy for Simple Splenomegaly. The spleen on section showed a simple hyperplasia. As a result of the operation there was an immediate rise in the blood colour-index.—Mr. Hey Groves also showed a Spleen removed from a woman with splenic enlargement, hepatic cirrhosis, and ascites, in which some improvement took place after operation, and suggested that removal of the spleen produced improvement by the relief of the portal circulation.—Mr. J. Lacy Firth demonstrated a specimen of Abscess of the Liver. Although there had been no symptoms of dysentery during life extensive ulcerative lesions were found in the colon post mortem.

# Reviews and Notices of Books.

*Irritability: a Physiological Analysis of the General Effect of Stimuli in Living Substance.*

By MAX VERWORN, M.D., Ph.D., Professor at Bonn Physiological Institute. With Diagrams and Illustrations. New Haven: Yale University Press. London (Oxford University Press), Toronto, Melbourne, and Bombay: Henry Frowde, Hodder and Stoughton. 1913. Pp. 264. Price 15*s.* net.

THE present volume constitutes the ninth of the annual series of the Mrs. Hespa Ely Silliman Memorial Lectures in the University of Yale—lectures which the testatrix desired should be so designed as "to illustrate the presence and providence, the wisdom and goodness of God, as manifested in the natural and moral world." Professor Verworn's lectures were delivered in 1911. The text in its present form was written in German in the same year, and the translation was made by the lecturer's wife with the help of Dr. Lodholtz, of the University of Pennsylvania.

Those readers who are conversant with the work of Professor Verworn and his pupils successively in the Universities of Jena, Göttingen, and Bonn will be glad to have this luminous account of the general effects and laws of stimulation in the living substance—and, indeed, no living substance exists without stimulation, while in the vital manifestations of all organisms the interplay of the most varied stimuli produces an enormous and manifold variety of effects. The work consists of nine chapters, which we take to represent nine lectures. In the first chapter, which is largely historical, the irritability of living substance, both as a general property of living substance and as irritability of a specific type, is discussed. Its study may be regarded as a path to the investigation of life, and the author's wish is to follow this path towards the knowledge of the vital processes and to endeavour to show what information the analysis of irritability and that of the effect of stimuli can give us of the mechanism of the processes in living substance. To this end he begins with the history of the question from the time of Francis Glisson (1597–1677), the founder of the doctrine of "irritability," and one who in a certain sense was a forerunner of those who interpreted nature from a physical standpoint. The

work of Johannes Müller on the "specific energy" of living substance (1801–1858), that of Haller and of Virchow in his epoch-marking "cellular pathology," the contributions of Bernard on the influence of anæsthetics, as well as the researches of many other observers, are passed in review, until he comes to the views of Hering, Haeckel, and those of Semon, culminating in what has been called the mneme."

The second chapter deals with the Nature of Stimulation, which contains a good deal of philosophic speculation as to cause and condition. A stimulus is regarded as "every change in the vital conditions," while the relation of one given state to another forms an indispensable point in the understanding of the stimulus. Finally, the author gives the definition, "stimulus is every alteration in the external vital conditions." Perhaps this definition still leaves something to be desired. Next the Characteristics of Stimuli are dealt with as regards (1) quality, chemical, thermal, photic, mechanical, and osmotic, and some forms of stimuli not ordinarily operative, e.g., many uncommon chemicals and certain kinds of rays; (*b*) direction, either positive or negative—the increase or strengthening or inhibition; (*c*) amount; (*d*) the threshold of stimulation which furnishes roughly a standard for the degree of irritability of living tissue (perhaps instead of the word "sub-threshold" "sub-liminal" would be better); (*e*) rapidity of alterations, a most important matter, which is discussed very fully.

The General Effect of Stimulation is next considered in a more systematic manner, especially as regards metabolism. In nature there is nowhere a "metabolism of rest." It is a convenient abstraction, to distinguish it from "metabolism of stimulation," and the "equilibrium of metabolism" in which readers of Verworn's terminology will recognise his term "biotonus," where assimilative and dissimilative processes are equal. The majority of all temporary responses to stimuli consist in alterations of rapidity of the vital processes. The author discusses Ostwald's definition of catalysis, and characterises certain responses as "catalytic stimulation and response" in contradistinction to another group of stimuli which cause qualitative alterations in the specific vital process—"metamorphic stimulation and response," e.g., the metabolic products of bacteria, and many reactions in chronic diseases. The analysis of asphyxiation is particularly interesting, and so is the discussion on Hering's "internal self-regulation of metabolism." All recovery after disease is based on this self-regulation.

The fifth lecture deals with the Analysis of the Process of Excitation, including such phenomena as the latent period, and above all the importance of oxygen—"the sudden discharge of energy in the aerobic organisms set free by the stimulus is brought about by the addition of oxygen." Readers should pay particular attention to Verworn's masterly exposition of this thesis. Conductivity is the burden of the next lecture. A normal medullated nerve conducts excitation without a perceptible decrease of the intensity. Perhaps the most novel chapter is that on the Refractory Period and Fatigue. The conclusion is reached that "fatigue is invariably asphyxiation." The fatigue of muscle, nerve centres, and peripheral nerves is considered. Nerve fibres are usually regarded as unfatigable, but according to the author "nerve is fatigued by the quick succession of stimuli"; indeed, all living systems are capable of fatigue. A somewhat long exposition is given on Interference of Excitations, and the lectures are brought to a close by a study of the Processes of Depression.

The whole work is singularly suggestive, and presents the author's views with a lucidity which leaves little to be desired. The subject of so-called general physiology receives in this exposition a handsome and in many ways an original contribution to its already rich stores of facts, the author's aim being to infuse uniformity into the heterogeneous mass of isolated observations. He has succeeded in no small degree in his aim. We thank him most cordially for his graphic, interesting, and philosophic contribution to the literature of "Irritability."

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*Asthma and its Radical Treatment.*

By JAMES ADAM, M.A., M.D. Glasg., F.R.F.P.S. Glasg., Dispensary Aural Surgeon, Glasgow Royal Infirmary. London: Henry Kimpton; Glasgow: Alexander Stenhouse. 1913. Pp. 184. Price 5*s*.

Dr. Adam's main object in writing this book has been to prove that asthma is primarily a toxæmia. The clinical description he gives of the disease indicates that he is dealing mainly with spasmodic asthma rather than with the bronchial form.

The exact pathogeny of asthma has been much disputed, and even at the present day diverse views are held by different observers. The majority of physicians are of opinion that the disease is the result of bronchial spasm brought about by varying influences. Dr. Adam accepts the theory of bronchial spasm and of a resulting hyperæmia of the mucous membrane, but maintains that these two conditions are the result of a toxæmia. He summarises his main points thus. Asthma is primarily a toxæmia; this condition arises partly in the bowel, partly in the tissues; it arises partly by absorption of nitrogenous poisons resulting from intestinal putrefaction under microbic action, but is mainly due to an error in nitrogenous metabolism, the result of imperfect oxidation or enzyme action. In short, the poison arises from protein food or protein tissue. The error in protein metabolism is closely connected with excess of carbohydrate in the diet. The toxæmia, whether arising in bowel or tissues, or both, tends to show itself first as catarrh, later as spasm in the respiratory tract.

We cannot admit that we are convinced by the evidence and arguments which Dr. Adam advances. It is highly probable that some cases of asthma are due to the absorption of toxins and products of faulty digestion. The term "peptic asthma," which has been given to the paroxysms of dyspnœa which bear a definite relationship to gastric and intestinal disturbances, shows that this syndrome has been appreciated. Further, it is known that it is wiser for an asthmatic patient to take the principal meal in the middle of the day; but to make a specific statement that all cases of asthma are due to a toxic condition of that nature requires more proof than Dr. Adam produces before it can be generally accepted.

Dr. Adam fully recognises the importance of thoroughly examining the nasal passages for any lesion, and also the beneficial effects that may be obtained in some cases by removing causes of irritation which may exist in the nose; but he sums up the relation of nasal disease to asthma by saying that the "toxæmia alters the asthmatic so that his condition becomes like a powder magazine; nasal disease is apt to supply sparks which cause the explosions of asthma."

He considers that the clinching evidence for asthma being a toxæmia is seen in the therapeutics of the disease, and gives full directions as regards the general mode of life which a patient should follow, for he holds that a combined system of regular diet and regular fasting is the most important element in the treatment of asthma, as such a course arrests the toxæmia and prevents a fresh accumulation of poisonous products. The instructions which he gives as regards exercise and fresh air are certainly good, and may be followed with advantage, and with the general drug treatment which he prescribes we are quite in accord, but we do not think that the chapter on treatment and diet is such a powerful support to his theories as he maintains. Doubtless great care in diet is essential to an asthmatic, but we believe that the majority of physicians will agree that in spite of all care as regards diet and general mode of living the essential neurotic element will assert itself and cannot be disregarded. The place of residence, temporary or permanent, is undoubtedly a powerful factor in exciting or preventing attacks; clinical evidence in support of this is overwhelming. Dr. Adam's explanation is that "place asthma" is due to a material change of regimen, or that the dread which patients have to certain places adversely influences their metabolism and renders them more liable to attacks, or that damp localities are certainly bad for asthmatics. These remarks are suggestive but not conclusive. The main outlines of treatment laid down are good, and if followed will be found of benefit in a large number of cases, but there are many patients in whom improvement will not follow unless other means than are suggested in this work are adopted.

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*Müller's Serodiagnostic Methods.*

Authorised translation from the third German edition by ROSS C. WHITMAN, B.A., M.D., Professor of Pathology, University of Colorado School of Medicine. London and Philadelphia: J. B. Lippincott Company. Pp. 143. Price 6*s.* net.

A GLANCE at the contents of a book such as this affords striking evidence of the number and complexity of the reactions presented by the serum of the blood, as well as of the variety of ways in which help is sought by the clinician and others at the hands of the laboratory worker.

After a brief but practical account of the ways of preparing immune serums from animals, and of obtaining and keeping the blood both of lower animals and of man, the author deals first with the precipitation reactions as applied to the recognition of human blood and of meat adulterations, as well as to the diagnosis of syphilis, while three separate methods are described by which the peculiar property of syphilitic blood of forming floccules with colloidal solutions is demonstrated. The uses made of the agglutination reaction are next dealt with and the different modifications introduced by various observers are set forth, this section being followed by one devoted to the phenomena of bacteriolysis *in vivo* and *in vitro*. Cytolytic reactions include Freund and Kaminer's method of cancer diagnosis, Abderhalden's test for pregnancy, and Moro's alexin test, while a considerable amount of space is naturally devoted to the various reactions in which deviation of complement plays a part. By variations of this test the presence of human protein may be demonstrated medico-legally, while not only syphilis—seven modifications of the Wassermann reaction are here described—but cancer, gonorrhœa, and tuberculosis are said to be thus recognisable. The power possessed by cobra venom to produce hæmolysis is found to be modified by the serum of certain patients, and use has been made of this peculiarity for testing purposes; syphilis, cancer, pregnancy, and certain psychoses are examples of such conditions. Other procedures dealt with are the estimation of the antitryptic content of the serum, the meiostagmin reaction, opsonic indices, and the titration of antistaphylotoxin and diphtheria toxin in the serum. Such an enumeration of contents shows the extraordinary amount of material which is compressed into the small compass of this book, while the special feature of the work is the detailed description of the exact method of carrying out each test. It should thus be of great use to laboratory workers who are constantly called on to perform the various tests and can hardly carry all the details in their memories.

The translator has done his work well and has himself added one or two procedures which have been described since the German edition was produced. It will be interesting to note how many of the numerous methods here described stand the test of time and are permanently adopted. The author in his preface to the third edition holds that it is yet too soon to condemn any of them and that further experience must be awaited. The translator notes that the Noguchi modification of the Wassermann reaction has been omitted at the request of its author.

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*Massage, Manual Treatment, Remedial Movements, History, Mode of Application, and Effects.*

By DOUGLAS GRAHAM, M.D.; with a chapter on Massage of the Eye by Dr. A. DARIER, Paris. Fourth edition, illustrated. London and Philadelphia: J. B. Lippincott Company. 1913. Pp. 574. Price 21*s.* net.

SINCE the first edition of this work was published in 1884 the uses of massage have increased to such an extent, and the study of its effects has drawn so largely on other branches of the practice of medicine, that a complete description of the principles and practice of massage affords sufficient material for a text-book of moderate size. The book under review is stated to be a record of the personal experience of the author, combined with excerpts from the best writers in Europe and America. It covers both theory and practice.

After an interesting sketch of the history of massage in all countries, from earliest days until it was placed on a scientific basis by Peter Ling, of Stockholm, in the year 1813, the author devotes 35 pages to the mode of applying massage. All that can be said on the subject in a general way seems to have been said in this chapter. The rest of the book deals with the application of massage in several conditions. The physiological effects of massage are very fully considered, the results and in many cases the details of experiments performed by the principal observers being fully discussed. The eighth chapter contains a full account of the interesting and illuminating experiments by Professor C. F. Hodge on "The Changes due to Functional Activity in Nerve Cells," which was published in the *Journal for Morphology*, November, 1892. There are separate chapters on the value of massage in neurasthenia, heart affections, affections of the central nervous system, Raynaud's disease, writer's cramp, neuralgia, muscular rheumatism, lateral curvature of the spine, joint affections, &c.; also one on massage of the eye by Dr. A. Darier, of Paris. In Chapter IX., on massage of the uterus

and its surroundings, we are led to expect a report of 239 cases, but we have not been able to find more than a reference to it. Handling of the heart in chloroform disasters and manipulation of the abdomen in intestinal obstruction are subjects that it surprises us to find in a text-book on massage, and what can be said of the recommendation to use massage in appendicitis?

Each chapter has its motto, an appropriate heading to what follows. That of the seventh chapter is from *Love's Labour Lost*—

> "I fear too much rubbing! Good night,
> My good owl."

The chapter deals with massage for local conditions in neurasthenia, and doubtless the author's opinions of its efficacy are crystallised in the motto. The motto is one which without much risk of misapplication might be put to a more extended use amongst exploiters of massage and physical culture.

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*The Pathology of Growth.*

Edited by A. E. BOYCOTT, B.Sc., M.A., M.D. Oxon. Vol. I.: Tumours. By CHARLES POWELL WHITE, M.D. Cantab., F.R.C.S. Eng. London: Constable and Co. 1913. Pp. 235. Price 10*s.* 6*d.* net.

TEXT-BOOKS of pathology by English authors, other than those which may be classed as students' handbooks, are sufficiently uncommon to deserve more than usual attention, and the first volume of Dr. Boycott's series is certain of a very warm welcome. It is presumably intended in the first place for those students who look upon pathology as something more than a mere obstacle in the cross-country run to a medical degree; and few who read this volume, however close their acquaintance with the subject, will lay it down without a sense of gratitude to the author.

Dr. Powell White begins, in chapters that could hardly be bettered, with a consideration of the problems of development and growth and the relationship of functional activity thereto. The directions in which variations in these processes can occur are pointed out, the variations being divided into two main groups—"adaptive" and "progressive." Adaptive variations are "the result of definite extrinsic causal factors, and are useful in nature and come to a definite termination"; progressive variations are "not attributable to definite extrinsic causal factors; they are harmful in character, and are not limited by the needs of the organism." Considerable stress is laid on the distinction between these two types of variation, and in his conclusions the author includes tumours amongst the progressive processes as "examples of progressive hypertrophy involving minute cell groups or complexes instead of the whole organ."

In dealing with the description of tumours Dr. Powell White gives an admirably clear and concise account of our knowledge of the different varieties of tumours, their structure, and their mode of growth. He adopts a purely histological basis of classification with three main groups—organ, tissue, and cell tumours, subdividing the last two according to the type of tissue or cell involved. This method may have drawbacks from the point of view of a general consideration of tumour growth, but for purely descriptive purposes it is perhaps the simplest and clearest. Particularly excellent is the lucid way in which the tumours occurring in connexion with lymphadenomatous tissues are treated. Following a short chapter on the biological aspect of tumour formation, the last chapters are devoted to a study of the factors concerned in the causation of tumours. Here the author gives us very concisely the facts which have been ascertained, and he considers in an impartial way the conclusions that may be drawn therefrom.

With regard to the theories of a parasitic origin for cancer, Dr. Powell White points out very forcibly the almost insuperable difficulties involved in the assumption of a specific parasitic origin, but he adds that "these difficulties entirely disappear if we consider the cancer cell itself as a parasite, and cancer as a process of infection by cancer cells." This is a repetition of the views expressed in his Erasmus Wilson lectures in 1902,[1] but we doubt the wisdom of the statement, for unless we use the word parasite in a sense quite foreign to its general meaning we find ourselves faced with the view advanced by the late Sir Henry Butlin,[2] and have surely to admit a new creation of living thing arising from our tissue cells. The illustrations, which are mostly from original photomicrographs, are very numerous and particularly good.

We have only one serious criticism—perhaps an ungenerous one in these crowded days—to offer, but we think that Dr. Powell White is rather too reticent in giving us his own conclusions on the facts that he has marshalled so ably for our instruction. This may be inevitable in dealing with so complex a subject as the growth of tumours, but there are few people who could guide us better than the author, and we fancy that many of his readers will wish at several points of the book that they might get a rather deeper insight into his own conclusions. We look forward with great interest to the remaining volumes of this series, and if Dr. Boycott succeeds in maintaining the level reached by the first he will assuredly receive the thanks of all those who are engaged in the study and in the teaching of pathology.

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*Handbuch der Pathogenen Mikro-organismen.*

Herausgegeben von Dr. W. KOLLE und Dr. A. VON WASSERMANN. Zweite vermehrte Auflage. Part 45, pp. 100, price 5 marks; part 46, pp. 150, price 5 marks; part 47, pp. 130, price 5 marks; parts 48 and 49, pp. 332, price 10 marks; parts 50 and 51, pp. 216, price 10 marks; parts 52, 53, and 54, pp. 384, price 15 marks. Jena: Gustav Fischer. 1913.

THE successive parts of this monumental work continue to appear with commendable regularity. Of the parts before us the first two deal with the bacteriology of several affections of the lower animals, such as chicken cholera and swine fever. Then follows an important chapter on the bacteriology of the healthy mouth by Dr. E. Küster, who has also contributed the accounts of the flora of the healthy nose and the healthy vagina. Important also is the chapter on the significance of the bacteria of the intestinal canal, also written by Dr. Küster. Professor H. Conradi and Dr. W. Bierast have written an interesting article on the bacillus coli communis as a cause of disease. Dr. T. Axenfeld has contributed an elaborate account of the bacteriology of the different forms of conjunctivitis. The chapter on the various forms of spirochætæ which cause disease is interesting; it is followed by a chapter on the spirochæta pallida. Professor P. Muhlens has described the spirochætæ

[1] THE LANCET, Feb. 22nd, 1902, p. 494.
[2] THE LANCET, Nov. 25th and Dec. 2nd, 1911.

of yaws and of relapsing fever. A very full account is given by Professor Weinberg of the echinococcus, including the serum diagnosis of its presence. Professor Fulleborn has written a very full description of the filariæ affecting men; it occupies 160 pages. One of the most important contributions is that of Dr. B. Lipschutz, which deals with those causes of disease which are able to pass through a porcelain filter. This, of course, does not constitute a natural group of causes of disease, but the very difficulty of finding the excessively minute organisms distinguished by this character makes it convenient to class them together. Some, indeed, have been seen, but many still evade the microscope. Still, it is worthy of note that there are some 40 diseases in which the infective material can be filtered. There is also one section dealing with general pathology and treating of agglutination, opsonins, and the experimental investigation of tumours.

## LIBRARY TABLE.

*Guide to the Microscopic Examination of the Eye.* By Professor R. GREEFF, Director of the University Ophthalmic Clinique in the Royal Charity Hospital, Berlin. With the coöperation of Professor STOCK, Freiburg, and Professor WINTERSTEINER, Vienna. Translated from the third German edition by HUGH WALKER, M.A., M.B., C.M.Edin., Ophthalmic Surgeon to the Victoria Infirmary, Glasgow. London: The *Ophthalmoscope* Press. 1913. Pp. 86. Price 7*s.* 6*d.* net.—The third edition of Professor Greeff's "Guide to the Microscopic Examination of the Eye" will be welcomed. It has long been the most generally serviceable book on the subject. In this edition he has obtained the coöperation of Professor Stock and Professor Wintersteiner, both well known for their work on the pathological anatomy of the eye. The translation by Dr. Hugh Walker, of Glasgow, has been appearing serially in the *Ophthalmoscope*, and is now available in a more convenient form. It is needless to say that the subject matter is thoroughly reliable and contains all that the ordinary student requires, as well as some special methods of preparation and staining which will prove useful for research work. Some valuable references to the literature of the subject are given, so that the student is put in the way of still further extending his knowledge. The translation leaves nothing to be desired, and as a book of reference for the laboratory it will prove very valuable.

*Pathologisch-anatomisches Praktikum für Studierende und Aerzte.* By RICHARD OESTREICH. Berlin and Vienna: Urban and Schwarzenberg. 1913. Pp. 304. Price 6.80 marks.—The author in his preface states that this book is intended merely as a companion to students attending their course in pathological anatomy, and that it can in no way replace the special text-books. It is possible that in the land of its birth the book may serve a very useful purpose, and certainly the student who carried out the various investigations described would make a very exhaustive post-mortem examination; but in any course in which there is an adequate teaching staff such aids as this volume affords should be unnecessary. There are, however, two features in the book which deserve special mention. By a somewhat wearisome reiteration it emphasises the need for close attention to detail, and it devotes unusual care to bacteriological investigation. Both these are points on which the young morbid anatomist is not infrequently found wanting. The book is divided into three parts. Part I. deals with a description of technique, macroscopical, microscopical, and bacteriological. Part II. deals with pathologico-anatomical diagnosis. Part III. is concerned with general pathology. Much of this last part might well be omitted, for many of the subjects included—e.g., precipitins and opsonins—cannot possibly be discussed adequately in the space allotted, and by no stretch of imagination can they be included in pathological anatomy.

*Obstetrics for Nurses.* By JOSEPH B. DE LEE, Professor of Obstetrics, Northwestern University Medical School, Chicago. Fourth edition, thoroughly revised. London and Philadelphia: W. B. Saunders Company. 1913. Pp. 508. Price 12*s.* net.—In this, the fourth, edition of Dr. de Lee's "Obstetrics for Nurses" both the text and the illustrations have been thoroughly revised. There is a description of the after-care of patients following operations for fistula and the proper methods of managing a retention catheter, a very important matter from the nursing point of view. An illustration and a short account are given of Momburg's method of applying a rubber cord to the abdomen for the arrest of uncontrollable post-partum hæmorrhage. Attention is also called to the recent revival of the practice of direct blood transfusion, to which, however, there does not appear to be any reference in the index. The section on Cæsarean section has been considerably amplified in view of the increasing frequency with which the operation is performed at the present time. The chapter on infant feeding, which contains much sound advice, has been thoroughly revised by Dr. F. X. Walls. The book contains all the good characteristics of the earlier editions, and is one which we can cordially recommend to obstetric and gynæcological nurses.

*Biochemie des Wachstums des Menschen und der Höhern Tiere.* Von Dr. Phil. et Med. HANS ARON, Assistentarzt an der Kgl. Universitäts-Kinderklinik in Breslau. Jena: Gustav Fischer. 1913. Pp. 71. Price 2.50 marks.—This brochure "On the Biochemistry of Growth" is reprinted, with additions, from the "Handbuch der Biochemie." It is a most useful and painstaking account of a field of practical importance which has been but little cultivated, so that we are all the more grateful to the author for the trouble he has taken in presenting the matter in such a suggestive form, though as usual composition tables must necessarily bulk largely in its presentation. The suggestions and reflections of the author are particularly interesting.

## MISCELLANEOUS VOLUMES.

WE have received a number of text-books on chemistry, physics, and biological science which may conveniently be reviewed in this column.

In his *Organic Chemistry for Students of Medicine* (London: Gurney and Jackson. 1913. Pp. 328. Price 6*s.* net) Professor JAMES WALKER, LL.D., F.R.S., of the University of Edinburgh, while limiting his treatment of the subject to the requirements of students of medicine, has made an effort to preserve scientific method. He realises the dangers of the mere cram-book, which he hopes to have avoided by selecting those chemical substances which are of importance not so much in systematic or synthetic chemistry as for their medical interest. It is, of course, true that the medical student cannot dispense with chemical study when he has passed his first professional examination, since he is faced with chemical considerations when he pursues his education in physiology, pathology, and pharmacology. In a word, the medical man nowadays must keep some pace, at all events, with the developments of biochemistry. We think Professor Walker has been wise in his

selection of materials, and also in regard to their sequence of treatment. Though writing as a pure chemist, he shows a familiarity with the medical significances of the subjects which he has elected to include in his book.——An excellent series of popular lectures is *Chemistry in Daily Life*, by Dr. LASSAR-COHN (London: H. Grevel and Co. 1913. Pp. 318. Price 6s.). The book is translated by Mr. M. M. PATTISON MUIR, and has reached a fifth edition. That it is appreciated is shown in the fact that it has been translated into 13 languages. We are not surprised at this, since it presents in a clear, intelligible way the chemistry of familiar everyday objects and occurrences. In Mr. Muir's words, "the author shows that chemical phenomena are intimately bound up with our daily lives, and that whether we are conscious of it or not we are constantly carrying on chemical operations." That of course is true, and those who care to know what these phenomena and operations amount to in clear terms of chemical science will read these lectures with pleasure and profit.

Industrial chemistry is represented by *The Sugars and their Simple Derivatives* (London: Gurney and Jackson. 1913. Pp. 242. Price 7s. 6d.), by JOHN E. MACKENZIE, D.Sc., Ph.D. This book is based upon a course of lectures delivered by the author at the Birkbeck College, London, in 1903. It serves the very useful purpose of giving an extended account of the sugars which is not to be found elsewhere. The sections on the action of bases on sugar, for example, give more detailed information than is usually afforded in a text-book, and the reader has the advantage also of being referred to original papers on the subject if he wishes to carry his information further. Amongst the carbohydrate group the sugars have received more attention than any other members, and hence, as the author points out, "the chemical configuration of the majority of them has been elucidated." This elucidation forms not the least interesting topic in the book. The closing chapter on metabolism contains necessarily a reference to glycosuria, which the author is inclined to reduce to simple chemical terms expressed in failure of oxidation, the sugar passing unchanged through the kidneys "instead of being burned in the usual way."——Though intended for the guidance of technologists there are some interesting scientific principles at stake in the *Practical Management of Pure Yeast*, by ALFRED JORGENSEN (London: The Brewing Trade Review. Second edition. Pp. 128. 1913. Price 5s. net). On this account there is in the book some appeal to the purely scientific reader. The control of fermentation is, of course, of first importance in the brewing of beer, and it is the study of this question which has resulted in the production of a uniformly sound and wholesome beverage. The analysis of yeast and the preparations of pure cultures receive special treatment.

A simple course of scientific exercises, chiefly chemical, is outlined in the *First Year Course in General Science* (London: William Heinemann. 1913. Pp. 113. Price 2s. 6d. net), by Mr. E. A. GARDINER, M.A., Senior Science Master, Berkhamsted School. Some idea of the ground covered is conveyed by the headings of the three parts into which the book is divided—viz., Simple Measurements, Some Common Apparatus and Instruments, and Properties of Water and Air. The method of instruction takes the interrogative form, and the questions asked are in simple terms, though they involve great principles. The method is attractive, and is likely to succeed, for the author knows how to introduce his subject in steps easy to ascend. If schoolboys were helped in this way many of them would be grateful for such groundwork when they come to apply themselves to a career which demands a knowledge of general scientific principles.——Another book for school use is *Introductory Electricity and Magnetism* (London: William Heinemann. 1913. Pp. 373. Price 2s. 6d.), by CARL W. HANSEL, B.Sc. (Hons.) Lond., which presents the subject in experimental stages adapted to the beginner's needs. In saying this we must limit the term beginner. We refer to the study of this particular department of science, for the book would be of little use to the student unless his education in other scientific directions had reached a fairly high level. The descriptions of the experiments, for example, are not always in elementary terms, and the subject is not pursued very far before (in the early pages of Chapter VI.) equations are introduced. There are 25 chapters in all and it is difficult, therefore, to follow the claim of the author that "the earlier chapters in each section of the book deal with purely qualitative phenomena and involve no mathematics or mechanics. These portions are complete in themselves and probably sufficient for very elementary students." Even some of the abbreviations used would, we imagine, not be understood by "very elementary students," who would at all events have to possess a knowledge of the metric system and know that cm. meant centimetres and grs. grammes on the opening page. The book is, however, a very useful one addressed to students who have been trained in general scientific principles and who require to specialise in that department of physical science which is here dealt with.—— An interesting little volume, dealing very briefly with the history of radio-activity and the properties of radio-active substances, is *Radium: Its Production and Uses*. By SYDNEY FAWNS, F.G.S. (London: The Mining Journal. 1913. Pp. 60.) It is intended for popular reading only, but it contains a bibliography of all the principal works in English which will be useful to those who wish to pursue the subject further.

The Cambridge Manuals of Science constitute a very useful series intended to give an accurate, yet popularly expressed, bird's-eye view of the essential subjects of which the various manuals treat. *The Life Story of Insects*, by Professor GEORGE H. CARPENTER (Cambridge University Press. 1913. Pp. 134. Price 1s.), expounds in a fascinating manner the facts of the various transformations undergone by insects. ——*The Flea*, by Mr. HAROLD RUSSELL, B.A., F.Z.S. (Cambridge University Press. 1913. Pp. 125. Price 1s.), deals in an up-to-date manner with a special insect, which, besides being an unmitigated nuisance, is also a dangerous pest in at least one of its varieties, as a perpetuator and transmitter of plague. The book is the more interesting in that this particular insect has received little or no attention in English literature, while, according to the author, more species of fleas are now known from the British Islands alone than were known from the whole world some 30 years ago, when Taschenberg's "Die Flöhe" first appeared.

## JOURNALS AND MAGAZINES.

*Annals of Tropical Medicine and Parasitology*. Series T.M., Vol. VII., No. 3, B.—In this number of the Annals Dr. J. W. Scott Macfie, of the West African Medical Staff and Director of the Medical Research Institute, Lagos, contributes a short preliminary note on the development of a human trypanosome in the gut of Stomoxys nigra, a fly that infests the native towns of Nigeria. If, as seems probable, this fly is capable of serving as the intermediary host of trypanosomiasis, further investigations into the subject are very desirable.—Dr. W. Rogers supplies a very interesting note on a case of loa-loa, the case being his own; and his note is in reality a valuable account of the symptoms observed in his own person, his infection having been contracted some years ago while he was serving in West Africa.—Recent experimental research bearing upon blackwater fever is summarised in a brief paper by Dr. J. O. Wakelin Barratt.—A description of a fictitious native disease of Zululand, called "isigwebedhla," is given by Dr. G. A. Park Ross, Government pathologist and bacteriologist for Natal. He regards this alleged malady as the invention of some imaginative native "doctor," and believes it to be merely a name for the advanced stage of any acute febrile disorder.—Perhaps the most interesting contribution from the epidemiologist's point of view is the last in the number—namely, that on the vomiting sickness of Jamaica, by Dr. Harald Seidelin, illustrated by a number of plates and comprising over 100 pages of the Annals. It may be remembered that Dr. Seidelin was despatched to Jamaica to ascertain if this malady was related in any way to yellow fever. Though the prevalence was almost over by the time he reached the colony, he managed to see 62 cases. With five exceptions, to which he makes further reference, the evidence on the whole did not reveal any identity of the disease with yellow fever. He believes they were due to a specific organism for which he suggests the name of diplococcus jamaicensis, and which should be further investigated. In one of the five cases (a Chinaman) mentioned above he found a few ringed organisms resembling the paraplasma flavigenum, but they were not typical. Some of the other four patients had black vomit which had excited some suspicion, but it could not be said positively that they were instances of yellow fever, and no organisms were isolated.

*Aberdeen University Review*.—The first number of this review, to be published once a term by a committee of

management representative of the University Court, the Senatus, the General Council, and the Students' Representative Council, lies before us. While not to be regarded as the official organ of the University, it is to be representative of the academic life in every direction. The present issue is a well got up review containing many interesting articles, none of which, however, in the present issue has any special bearing on the medical side of the university. The outstanding article is one by Lord Kennedy, entitled "Our Chancellor," accompanied by an admirable portrait of Lord Strathcona. Verses on Aberdeen by Mr. Thomas Hardy and Mr. William Watson are reprinted. The review will undoubtedly be of interest to graduates in all faculties of Aberdeen University. The price is 1*s.* 6*d.* each number, or 3*s.* 6*d.* per annum by subscription.

ERRATUM.—The title of Dr. Arthur Bolles Lee's book reviewed in THE LANCET of Nov. 29th, p. 1553, is *The Microtomist's Vade-Mecum*, not the Microscopist's Vade-Mecum, as printed.

# New Inventions.

## APPARATUS FOR THE PRODUCTION OF ARTIFICIAL PNEUMOTHORAX.

THE apparatus here illustrated had its origin in the rough but efficient model put together by a carpenter, the essentials of which were formed by two bottles, some rubber tubing and two glass tubes, contained in a wooden box. The gradual evolution of various simple modifications are the result of practical experience gained by myself and my friends, Dr. C. Lillingston, Dr. L. Colebrook, and the colleagues who have worked with me at Mundesley. Between us we have given many hundred injections of nitrogen. The advantages of the apparatus, which is now made and stocked by Messrs. Allen and Hanburys, Limited, 48, Wigmore-street, London, are as follows. Its simplicity eradicates as far as possible unnecessary complications which may only create difficulties in working. An even, easy, and perfect control of the gas is assured, because the bottles are movable and syphonage is used as the means of regulating the flow of nitrogen gas into the chest. The arrangement of a movable shelf in a tall box makes it easily possible to obtain well-graduated positive pressures up to any amount found safe in practice. The apparatus travels easily. The height of the apparatus gives room for a tall water manometer, the advantages of which are that the occasional high pressures needed are easily read; and secondly, that there is less risk of the fluid in the manometer, through any accident, flowing into the tubes. The tall narrow cylinder makes it easy to read the administration of comparatively small quantities of gas, which is advantageous for a first injection. The bottles contain a sufficient quantity of gas to meet the requirements of an injection for any ordinary case. The thistle funnel on the positive stem of the manometer obviates the risk of the fluid in the manometer being squirted out of it if the patient should cough. The bulb on the negative stem of the manometer prevents the fluid in the manometer from being sucked into the tube if through any chance a high negative pressure should occur. The marks both on the cylinder and on the part with the manometer on it are distinct and can thus be read at a glance. The screw clamp, put in at the suggestion of my friend, Professor Saugman, at the base of the manometer enables the mean intrapleural pressure to be taken during an injection of gas.

S. VERE PEARSON, M.D. Cantab., M.R.C.P. Lond.

Mundesley, Norfolk.

# THE GENERAL COUNCIL OF MEDICAL EDUCATION AND REGISTRATION.

WEDNESDAY, NOV. 26TH.

THE Council resumed its sittings at its offices, 299, Oxford-street, W. Mr. TOMES was again elected to occupy the chair for the day's sitting in the absence of the President, Sir Donald MacAlister.

*Penal Cases.*

Consideration of complaints against the conduct of practitioners was then undertaken.

The Council first proceeded to the consideration (adjourned from May 28th, 1913) of the case of Alfred Benson, registered as of 79, Maida Vale, W., M.R.C.S. Eng. 1880, M.B. U. Oxfd. 1880, who had been summoned to appear before the Council on the following charge:—

That being a registered medical practitioner you were on January 8th, 1913, convicted at the Central Criminal Court on your own confession of the following misdemeanour, namely, of having unlawfully, falsely, knowingly, and deceitfully put forward and represented that certain declarations made by you upon forms of applications for passports for certain persons named Louis Kisenevder and Lucas Küschneyder respectively were true; for which offences you were fined £50.

At the conclusion of the proceedings on May 28th, 1913, the President announced the decision of the Council as follows:—"Mr. Alfred Benson: I have to inform you that the Council has found your conviction proved; that the Council takes a very serious view indeed of the gravity of the offence of which you have been convicted; and that it has already marked its sense of the gravity of such offences by issuing in the medical journals and elsewhere in November, 1911, a warning notice as follows:—

Whereas registered medical practitioners are in certain cases bound by law to give, or may be from time to time called upon or requested to give, certificates signed by them in their professional capacity, for subsequent use either in courts of justice or for administrative purposes. And whereas such certificates include, amongst others:—(*a*) Under any statute relating to births, deaths, or disposal of the dead; (*b*) under the Lunacy Acts; (*c*) under the Vaccination Acts; (*d*) under the Factory Acts; (*e*) in relation to children or to excusing school attendance; (*f*) in connexion with sick benefit, insurance, and friendly societies; (*g*) in connexion with workmen's compensation; (*h*) in connexion with naval or merchant shipping; (*i*) for procuring the issue of Foreign Office passports; (*j*) for excusing attendance in courts of justice, in the public services, in public offices or at ordinary employments.

And whereas it has been made to appear to the General Council from time to time that some registered medical practitioners have given and signed untrue, misleading, or improper certificates of the above specified or other descriptions.

Now, therefore, the General Medical Council hereby give notice that any registered medical practitioner who shall be shown to have given any untrue, misleading, or improper certificate, whether relating to the several matters above specified or otherwise, is liable to be adjudged by them to be guilty of "infamous conduct in a professional respect" and to have his name erased from the Medical Register under Section 29 of the Medical Act, 1858.

In order to give you an opportunity to prove to the Council that you realise the gravity of your offence, and to produce evidence from your professional brethren regarding your character and conduct generally, the Council has postponed judgment till the November session, when you will be required to produce testimony to the effect above specified, and to your conduct in the interval."

Dr. BENSON attended in person. He submitted testimonials as to his character and conduct generally and in the interval from Sir David Ferrier, Sir Malcolm Morris, Mr. James Ernest Lane, and Dr. W. H. Willcox.

A letter was also read from the Rev. Alfred R. With, of Maida Vale School, testifying to the high esteem in which Dr. Benson was held both as a medical man and a neighbour by residents in the district. His conduct was quite irreproachable.

The CHAIRMAN (Mr. Tomes) announced the decision of the Council as follows: Mr. Alfred Benson, I have to inform you that the Council does not see fit to direct the Registrar to erase your name from the Medical Register.

The Council proceeded to consider the case of James Morrison Orr, registered as of Beulah Grove, West Croydon, M.D. R.U.Irel. 1882, who had been summoned to appear before the Council on the following charge:—

That being a registered medical practitioner you have knowingly associated in practice with an unqualified and unregistered person—namely, one Horatio Franklyn Sparling, and have knowingly authorised

or allowed the said Horatio Franklyn Sparling to exhibit a plate at 30, Northcote-road, West Croydon, with the inscription "Dr. H. F. Sparling" thereon above a plate bearing your name, and have thereby enabled the said Horatio Franklyn Sparling to attend and treat patients as if he were duly qualified and registered. And that in relation thereto you have been guilty of infamous conduct in a professional respect.

The complainants were the Medical Defence Union, represented by Mr. W. E. Hempson, solicitor.

Dr. Orr appeared in person, and was accompanied by his solicitor, Mr. J. W. Marten, of Messrs. Edridge, Son, and Marten, Croydon.

Mr. HEMPSON addressed the Council. He stated that the association of Dr. Orr with H. F. Sparling had been mentioned at an inquest at Croydon. Mr. Sparling had no claim to any registrable qualification, but nevertheless his name had been put out at Northcote-road for some period of time. He would submit a statutory declaration from Mr. Sparling as to the relationship which had existed between him and Dr. Orr, and would place him in the witness-box.

Mr. HORATIO FRANKLYN SPARLING was the first witness. He stated that he had made a statutory declaration. That declaration, which was read by Mr. Hempson, stated that Mr. Sparling had about Oct. 14th, 1910, entered into a verbal partnership with the said James Morrison Orr, a medical practitioner. By that arrangement his father, Horatio Osmond Sparling, was to furnish and equip a surgery at 30, Northcote-road. He (Mr. H. F. Sparling) and Dr. Orr were to carry on the profession of medical practitioners and to divide the total income made in equal shares. He put up a plate outside the front door at 30, Northcote-road, with the inscription of "Dr. H. F. Sparling" thereon, above a plate bearing Dr. Orr's name. This he did with the knowledge and approval of Dr. Orr, although the latter knew that he had no medical qualifications and was not registered as a medical practitioner in accordance with the Medical Acts. The partnership did not prove a success. The declaration went on to state there was a temporary break in the partnership about March 6th, 1911, when Mr. H. F. Sparling told Dr. Orr to remove his plate. The plate was finally taken down on or about April 13th, 1911. However, Dr. Orr and he came together again, and Dr. Orr attended at 30, Northcote-road as occasion required, and he (Mr. H. F. Sparling) stated that he paid him as before, and there had never been any break in this arrangement, although for the last two years he (Mr. H. F. Sparling) had practically confined himself to optics. During the time that he was in partnership with Dr. Orr, the latter introduced him to various people as "my partner Dr Sparling."

Examined further by Mr. HEMPSON, Mr. Sparling stated that his declaration was correct in every particular. He also stated that Dr. Orr had acted as anæsthetist to him on two occasions.

Cross-examined by Mr. MARTEN, witness said that he had formerly been a dispenser, and he had been with a practitioner in New Zealand almost two years.

In what capacity?—As a general assistant.

Witness admitted that before entering into the arrangement with Dr. Orr he had told him that he wanted to become a medical practitioner. Dr. Orr had told him that he was desirous of obtaining a surgery.

Mr. MARTEN: Dr. Orr suggested that if a surgery could be obtained you should join him as dispenser.

WITNESS: No.

I put it to you and you deny it?—Yes.

I put it to you that he undertook to get you through a preliminary examination?—No.

Mr. HORATIO OSMOND SPARLING, 30, Northcote-road, West Croydon, father of the previous witness, also gave evidence. His statutory declaration, which was also read by Mr. Hempson, set out that at the beginning of October, 1910, Dr. Orr called upon him at his house and told him that he and his son, Horatio Franklyn Sparling, had arranged to start a medical practice if he would assist them in fitting up and stocking a suitable place as a dispensary. He asked Dr. Orr if he was aware that his son was not qualified as a medical practitioner, and Dr. Orr replied, "He is a smart young fellow, and it will be all right." He accepted this assurance and took 30, Northcote-road, furnished a dispensary, paid for the necessary drugs, arranged for a red lamp to be fitted outside the house and the hours of attendance to be put on the window. He also spoke as to the plates. Dr. Orr's plate was finally removed and his son, Mr. H. F. Sparling, devoted his time principally to optics, although Dr. Orr came to 30, Northcote-road on various occasions for consultations with his son.

Answering Mr. HEMPSON, witness maintained that his declaration was correct.

Cross-examined by Mr. MARTEN, witness admitted that he had known that an unqualified person could not practise as a physician and surgeon.

You fitted up the surgery?—Yes.

I suggest to you that the real story Dr. Orr told you was that he had arranged to take your son as a dispenser, and that he was to coach him for his examinations.—I warned Dr. Orr that my son was not qualified.

In spite of that you put money into the affair?—It did not amount to much.

In spite of your doubts you put your money in?—Yes.

This concluded the complainants' case.

Dr. JAMES MORRISON ORR then gave evidence on his own behalf.

Mr. MARTEN read to him a statement which had been submitted on Dr. Orr's behalf in answer to the notice of inquiry. That statement was to the effect that Dr. Orr had never knowingly associated in practice with an unqualified and unregistered person, Horatio Franklyn Sparling. About the middle of October, 1910, it was agreed that Horatio Osmond Sparling should bear the expense of fitting up and stocking a suitable place as a dispensary, and that Dr. Orr should carry on a practice there, and that H. F. Sparling should act as dispenser and attendant. Dr. Orr was to assist in preparing H. F. Sparling in preliminary and further studies to enable him to become a qualified medical practitioner. Dr. Orr commenced attendance at 30, Northcote-road, with H. F. Starling as his dispenser and attendant. He had never knowingly authorised or allowed H. F. Sparling to exhibit a plate at 30, Northcote-road, with the inscription of "Dr. H. F. Sparling." The latter, without the knowledge or consent of Dr. Orr, had put up a plate, and in spite of his remonstrances refused to remove it when requested to do so. In consequence of the repeated refusals of H. F. Sparling to remove his plate there were continual disputes between him and Dr. Orr, and in March, 1911, Dr. Orr took down his own plate and ceased to attend at the dispensary. On the assurance of H. F. Sparling that he would remove his plate and seriously devote himself to study Dr. Orr again put up his plate at the dispensary. However, as H. F. Sparling's plate was not taken down, Dr. Orr removed both plates about April 13th, 1911, and his plate had never since been affixed to the premises. He had never since resumed practice there. Dr. Orr had not by any means whatever enabled H. F. Sparling to attend and treat patients as if he were duly qualified and registered. After H. F. Sparling had put his plate up Dr. Orr made it his business to warn persons who were likely to consult Sparling that the latter was an unqualified person.

Answering Mr. MARTEN, Dr. ORR said that that statement was quite correct.

Cross-examined by Mr. HEMPSON, witness maintained that H. F. Sparling acted in no other capacity than as dispenser and surgery attendant under his supervision. He had no authority to see patients.

What remuneration was he to receive for that?—Nothing whatever. I was to coach him for his preliminary examinations.

Witness denied that he ever introduced Sparling as his partner. He had never attended patients with him. He did not look upon him as a partner at all.

Do you deny that you were called into consultation to see a case with him and that you notified it?—I notified a case which I saw myself.

What was his position in relation to you after April, 1911?—Nothing at all.

Witness admitted that he gave an anæsthetic in one case, and he was very sorry for it. He admitted also that he sometimes had got sums of a shilling or eighteenpence from Sparling, but there never was such a thing as a settlement of accounts.

Mr. MARTEN then addressed the Council on Dr. Orr's behalf.

The CHAIRMAN (Mr. Tomes) intimated the decision of the Council as follows: Mr. Orr, I have to announce to you that the Council have found the facts alleged against you in the notice of inquiry to have been proved, and have directed the

Registrar to erase from the Medical Register the name of James Morrison Orr.

The Council adjourned.

THURSDAY, NOV. 27TH.

The Council resumed its sittings at its offices, 299, Oxford-street, W., Mr. TOMES being again elected to occupy the chair in the absence of the President.

A letter was read from Sir Donald MacAlister acknowledging the resolution of the Council in regard to his health.

*Penal Cases.*

The Council again considered complaints against the conduct of practitioners.

The first case to be considered was that of Harry Roberts, registered as of 63, Harford-street, Stepney, E., L.S.A. Lond., 1895, who had been summoned to appear before the Council on the following charge:—

That being a registered medical practitioner you have given, under the Public Health (Tuberculosis) Regulations, 1911, on Form of Notification A, to the Medical Officer of Health for the Metropolitan Borough of Stepney, notices in the four cases following—namely: Alice Peacock, dated July 31st, 1912; Dorothy Phillips (or Phillips), dated Oct. 1st, 1912; Albert (or Albert Edward) Wright, dated Dec. 25th, 1912; and Edward (or William Edward) Hartshorn, dated Jan. 22nd, 1913, all of which notices were untrue, misleading, or improper. And that in relation thereto you have been guilty of infamous conduct in a professional respect.

The complainants were the Stepney borough council, who were represented by Mr. Hart, instructed by Mr. G. H. Young, solicitor.

Mr. Roberts appeared in person and conducted his own defence.

Mr. HART, in addressing the Council, stated that the complaint had reference to certain cases in which it was alleged that Mr. Roberts had notified persons for tuberculosis under the order of the Local Government Board. In the first case, that of Alice Peacock, it was stated that at the time he made the notification he had not seen her. According to a statutory declaration this child's mother had told him that Alice was an out-patient at the Victoria Park Chest Hospital. In the second case, that of Dorothy Phillips, the child was brought to Mr. Roberts's surgery to be vaccinated, but it was stated that the clothes had not been removed for the examination of the chest. In the other two cases Mr. Roberts had notified for tuberculosis, but in other certificates granted about the same time it was stated that these persons suffered from other diseases. Counsel said that he would not press the point that a fee attached to the making of notifications, although that was an added reason for care. He would point out that the notification of tuberculosis in such cases led automatically to the expenditure of public money and also to domiciliary visits to the patients and to inquiries. Steps of this kind did cause when the notices did turn out to be misleading dissatisfaction amongst a class which it was difficult at all times to get to coöperate with the public health authorities. He understood that Mr. Roberts considered himself ill-used.

Mr. D. L. THOMAS, medical officer of health to the borough of Stepney, gave evidence to the effect that the notices in question in the case had been received from Mr. Roberts.

Mr. ROBERTS remarked that he admitted that they had been sent.

Cross-examined by Mr. ROBERTS, witness said that it was desirable that tuberculosis when it was diagnosed should be notified.

Mr. ROBERTS: You think it is better in certain cases of doubt that it should be notified, especially if there is strong suspicion.

Mr. THOMAS: That is another point. It would no doubt be better if in every case the patient was examined by an expert, so that the patient's friends should be relieved of any anxiety, but in tuberculosis steps are not always taken to examine the cases that are notified. I do not think that one is justified in notifying cases where there is any doubt without calling in a second opinion.

Mr. T. J. EVANS, chairman of the Stepney public health committee, in the course of evidence stated that apart from the case now under the consideration of the Council he had never heard anything against the professional reputation of Mr. Roberts. Personally, he did not think that Mr. Roberts did notify these cases for the purpose of getting the fee.

Mr. ROBERTS: You think I acted in good faith?

Mr. EVANS: From my own personal knowledge of you I should say that you acted in good faith.

Mr. ROBERTS then offered to the Council his explanation of the four notices. He said that in conjunction with four colleagues he had a very large practice in the East-end. He saw very many persons professionally in the course of the year. So far as notification of tuberculosis was concerned he took it that the whole object of the Act was to bring to the knowledge of the public health authorities every case of tuberculosis. He was of opinion that by notifying every case which he thought tuberculous he would be achieving that result. Certainly notifying a case of tuberculosis did not popularise a medical man. In the course of his practice he could say that there had not been a complaint by a patient of his lack of skill or attention. In regard to the particular cases now before the Council, he came to the conclusion when he saw them that the last two persons were suffering from tuberculosis. Other diseases could and did exist simultaneously with tuberculosis. Dorothy Phillips was brought to him for vaccination, and the mother had told him particulars of her health and that she was being treated for tuberculosis at the Victoria Park Hospital. He saw the child and accepted the mother's statement and notified the case. As to Alice Peacock, he would admit that he should not have deliberately reported the case. The notice was evidently inadvertently sent. The case occurred in July, 1912, and he did not hear of the matter until 1913. The mother had told him certain matters as to relatives. He was convinced that some carelessness must have occurred in this case. He regretted it. It had never happened before and would never happen again. The only thing one could do was to note one's mistakes and not repeat them. He fully realised the importance of a medical man's certificates being above all criticism. He appealed to the Council on his record. He acted in good faith. He urged that in three of the four cases his action was entirely regular. In the fourth case any error was purely accidental. In this case there were so many presumptions as to tuberculosis that he was bound to make a note of it. (Mr. Roberts afterwards went into the witness-box and submitted himself to cross-examination.)

The CHAIRMAN (Mr. Tomes) announced the decision of the Council as follows: Mr. Roberts, I have to announce to you that the Council does not see fit to direct the Registrar to erase from the Medical Register the name of Harry Roberts.

The Council then proceeded to consider the case of Thomas Francis Roche, registered as of 24, Eden-street, Kingston-on-Thames, L.R.C.P. Edin., 1892, L.R.C.S. Edin., 1892, L.F.P.S. Glasg., 1892, who had been summoned to appear before the Council on the following charge:—

That you abused your position as a medical man by committing adultery with a Mrs. Stuart, whom and whose husband you had been attending professionally, of which adultery you were found guilty by the decree of the Probate, Divorce and Admiralty Division (Divorce) of the High Court of Justice, dated March 4th, 1913, and made absolute on Sept. 17th, 1913, in the case of Stuart *v.* Stuart and Roche, in which you were the co-respondent. And that in relation thereto you have been guilty of infamous conduct in a professional respect.

The case was officially brought before the Council by the officials of the High Court.

Mr Roche attended and was accompanied by Mr, J. P. Hope, solicitor, Cardiff.

Mr. HARPER (the Council's solicitor) asked permission to amend the notice by inserting after "husband" the words "and household."

No objection to this course was taken by Mr. Hope.

Mr. HARPER then submitted to the Council evidence of the decrees. He remarked that the only issue which the Council had to consider was whether Mr. Roche had abused his position as a medical man.

Mr. J. D. STUART gave evidence. He stated that he had been married to Mrs. Stuart in 1902, and they had lived at Penarth, Dinas Powis, and Cardiff. He said that Mr. Roche had attended in the capacity of a medical man himself and his wife. In 1908 he had become very friendly with Mr. Roche, and had regarded him both as his medical man and his friend. He asked the Council, in conclusion, to mitigate any judgment which it might deem necessary because he believed that Mr. Roche intended to marry Mrs. Stuart.

The further hearing of the case was adjourned, and the Council rose.

FRIDAY, NOV. 28TH.

The Council resumed its sittings at its offices, 299, Oxford-street, W., Mr. TOMES being again chosen to act as chairman in the absence of the President.

*Apothecaries' Hall, Dublin.*

A report was received from the Executive Committee calling attention to correspondence with the Privy Council in regard to the Apothecaries' Hall of Ireland. The petition of the Apothecaries' Hall of Ireland, dated July 7th, 1913, had not been entertained by the Privy Council.

The Examination Committee presented another report on a letter of the Apothecaries' Hall, Dublin, commenting on the Council's treatment of its examinations. The Examination Committee's report contained extended observations on that letter. Sir Charles Ball in his speech brought those observations to the notice of the Council.

Sir CHARLES BALL moved :—

That the Medical Council direct the Registrar to transmit the report of the Examination Committee to His Majesty's Most Honourable Privy Council for their lordships' information.

He said that the report of the Examination Committee dealt with a letter which was received from the Apothecaries' Hall, Dublin, in answer to a former report of the Examination Committee which was received by the Council in May last. The letter was a remarkable document, and it was beyond belief that a responsible body like the Apothecaries' Hall would have replied in such terms to the Council. It contained a very large number of inaccuracies which the Examination Committee felt it was its duty to report to the Council. In the first place, the Apothecaries' Hall complained that the Examination Committee had exceeded the reference which was made to it. That he denied. The committee some time ago considered whether, in view of information before it, exceptional supervision of this body was still necessary, and also whether the best form of supervision was by the reports furnished by the assistant examiners. The committee reported accordingly. Sections 3 and 4 of the letter from the Apothecaries' Hall charged the General Medical Council with unworthy motives in their dealings with the Apothecaries' Hall of Dublin. The committee felt sure that it would be the desire of the Council to leave unnoticed charges which had been so recklessly made, but in supposed support of their contention the Apothecaries' Hall had cited certain acts of the Council which they say "have had a most damaging effect on the prosperity and finances of the Hall," and for which "no authority can be found under the Medical Acts." As these allegations contained grave misstatements of facts the committee considered that certain assertions should be answered in detail. The first "acts of the Council for which no authority can be found under the Medical Acts" were stated by the Apothecaries' Hall to be "varied and continuous inspections and reports." However, the committee relied on sections of the Medical Acts which, in its opinion, furnished the Council with ample statutory authority for the inspections and reports complained of. Section 18 of the Medical Act of 1858 gave the Council power to appoint persons to attend and be present at examinations. It was obvious that the purpose of appointing them was that they should report to the Council what they observed at such times. Section 3 (2) of the Medical Act of 1886 empowered the Council to appoint inspectors only for the final qualifying examination. Under Section 5 (2) of the same Act it was the duty of assistant examiners to secure at the examinations the maintenance of the requisite standard of proficiency in medicine, surgery, and midwifery. They were to perform such duties in the conduct of the examination as the General Medical Council might prescribe. Although the words "inspect" and "inspection" had been occasionally used in describing the duties of the assistant examiners, they were not at any time appointed inspectors under Section 3 of the Medical Act of 1886. The appointment of Dr. Finny in 1913 to visit and furnish reports on the professional examinations held by the Apothecaries' Hall, other than the portions conducted by the assistant examiners, had been made under the authority of Section 18 of the Medical Act, 1858. That disposed of the charges. It showed that the claim put forward by the Apothecaries' Hall, that these appointments had been made illegally, had no substance in it. Again, the Apothecaries' Hall said that in the past assistant examiners had acted after their period of office had expired, but it was the case that no definite period of office was assigned to them. Later a system of rotation was instituted. The objection which was brought forward now was not made at the time. In 1899 the Apothecaries' Hall asked to be relieved of the payment of fees to the assistant examiners except for days when they were actually engaged in surgical examination. The Council assented to this request, and consented to pay the assistant examiners fees for duties discharged by them under Section 5 other than actual services in conducting surgical examinations, and had since paid under this head sums averaging for the past few years upwards of £100 a year. Under Section 5 (3) the Apothecaries' Hall were liable for the whole remuneration payable to the assistant examiners had the Council so determined, and it was difficult to see how this arrangement could have had "a most damaging effect on the prosperity and finances of the Hall." The Apothecaries' Hall attributed the small number of candidates who selected the Hall for the whole of their professional examinations to the action of the Council in refusing recognition to its preliminary arts examination. The Hall was free to require of its candidates such qualification in arts as it thought desirable, but it had no right to claim that its preliminary examination should be accepted by any other authority. In conclusion having recapitulated those and other matters dealt with in the report of the Examination Committee, Sir Charles Ball intimated that the committee understood that Dr. J. Magee Finny had been deputed by the Council to be present under Section 18 of the Medical Act of 1858 at the examinations other than surgery of the Apothecaries' Hall, and that the assistant examiners, Mr. Conway Dwyer and Mr. Maunsell, had been requested to report on the surgical portions of the examination which they conducted. The committee therefore considered it desirable to await the receipt of these reports before the Council decided what, if any, further action it desired to take. The committee had learned that the Apothecaries' Hall had petitioned the Privy Council against what they called the "organised persecution" of that body by the Medical Council, and that the President, in transmitting to the Privy Council a reply framed by the legal advisers in answer to the petition, enclosed copies of the published report of the Examination Committee. The committee therefore thought that their lordships should have the opportunity of seeing the reply of the Apothecaries' Hall to that report, and the criticisms of the Examination Committee thereon.

Dr. NORMAN WALKER seconded the motion.

Dr. ADYE-CURRAN said that he wished to say a few words on behalf of this unfortunate body which had been so much maligned. Sir Charles Ball surely recognised that a serious muddle had been made. Dr. Finny had been described by the Irish Branch Council as an "inspector." The members of the Council knew perfectly well the meaning of the English term "inspector." He was to inspect examinations. Nobody other than an inspector could be paid. He did not want to deprive Dr. Finny of the 50 guineas which was to be paid to him for his work. He knew him well and had the very highest esteem for him; in fact, he was his own medical adviser in Dublin. But if the Apothecaries' Hall was to be penalised, let it be done legally. It was under the Medical Act of 1886 that an inspector was appointed, and a person appointed under the Medical Act of 1858 was not an inspector. He might be called a visitor, but he was not entitled to be paid. The fact that Dr. Finny was to receive 50 guineas showed that he was an inspector. It might be that he was a sort of an inspector, but that explanation was not good enough for the General Medical Council. If Dr. Finny reported as an inspector he would be reporting without being appointed as such.

Sir JOHN MOORE maintained that Dr. Finny was quite validly appointed to report upon the examinations prior to the final.

Dr. SAUNDBY asked what powers the Council had to expend the money on this matter.

Sir CHARLES BALL replied that by statute expenses might be incurred for the administration of the Act of 1858.

Dr. MACKAY stated that the Council had time after time examined the first professional examinations of various bodies and it had paid the examiners.

The motion was carried by 26 votes to 2. Four members present did not vote.

A motion, proposed by Dr. ADYE-CURRAN and seconded by Sir CHARLES BALL, "That the question of the legality of the appointment and payment of Dr. Finny be referred to the legal advisers of the Council," was rejected. Seventeen members voted against it, 8 voted in favour of it, and 8 members present refrained from voting.

The Examination Committee submitted to the Council the reports of the final examinations in surgery of the Apothecaries' Hall, Dublin, held in July and October by the assistant examiners in surgery, Professor Conway Dwyer and Mr. R. C. B. Maunsell. In the report the assistant examiners remarked:

The following letter, of which a copy is appended, was handed to Mr. Maunsell before the clinical examination by Dr. Adye-Curran. We think it is desirable that this matter should be brought under the notice of the President and Members of the General Medical Council. Dr. Adye-Curran also said to Mr. Maunsell that if he rejected any candidate, such candidate would have cause of action for damages against him, as he had not been legally appointed as examiner.

The following letter was appended to the report:—

Apothecaries' Hall of Ireland, Mary-street, Dublin,
July 24th, 1913.

R. C. B. Maunsell, Esq., M.B., 32, Lower Baggot-street, Dublin.

SIR,—On behalf of the Apothecaries' Hall of Ireland which I represent, I beg hereby to protest against your acting in the capacity of surgical examiner at the forthcoming examinations inasmuch as you have not been legally appointed.

I have the honour to be, Sir, your obedient servant.

(Signed) F. G. ADYE-CURRAN,
Representative of the Apothecaries' Hall of Ireland
on the General Medical Council.

The report of the Examination Committee drew the attention of the Council to this matter. It stated that—

The Committee are of opinion that any formal protest against the appointment of an assistant examiner in surgery should have been made, not to the examiner, but only to the Council.

Dr. ADYE-CURRAN said to the Council that in this instance the Council did not appoint. The gentleman who acted was nominated by the Irish Branch Council and appointed by the President, which he (Dr. Adye-Curran) held was not in accordance with the form laid down in the Act.

The Council received the reports.

*Examinations for the Services.*

A report was received from the Examination Committee on the returns as to examinations for the Services received since the last session of the Council. It contained the following observations:—

Twenty-five commissions were offered in the Naval Medical Service, September–October, 1913. Fourteen candidates competed, 13 of whom passed, one being rejected in medicine and surgery.

The Royal Army Medical Corps offered 5 commissions in July, 1913. Twenty-one candidates entered for the examination, but only 17 competed. All qualified and 5 passed for vacancies.

It is not stated how many Commissions were offered for competition in the Indian Medical Service in July, 1913. Twenty-two candidates entered for examination, 6 were rejected, 16 qualified, and 12 passed for vacancies, this being probably the number of commissions offered. The candidates rejected all failed to obtain qualifying standard (half marks), and 5 were also rejected in pathology and bacteriology, one of the latter being also rejected in midwifery.

The committee are glad to note the small number of rejections, and the absence of any unfavourable criticisms on the general education of the candidates. There still appears to be a serious shortage in the number of candidates for commissions in the Royal Navy.

*Exemptions to Students.*

A report was received from the Examination Committee on exemptions granted by British licensing bodies to students who had taken part of their examinations at institutions whose qualifications did not entitle to registration in the United Kingdom.

*Public Health Committee.*

Mr. Verrall was appointed a member of the Public Health Committee in place of Dr. Lorrain Smith.

*Pharmacopœia Committee's Report.*

The Pharmacopœia Committee reported to the Council as follows:—

From May 26th, 1913, to Nov. 18th, 1913, the number of copies of the British Pharmacopœia (1898) sold by the publishers was 569. The total number of copies sold in the year beginning Nov. 23rd, 1912, was 978. Up to the present time 45,568 copies of the Pharmacopœia, and 4522 copies of the Indian and Colonial Addendum have been sold.

Two further sections of the text of the new Pharmacopœia have been prepared by the editors, and have been submitted to the committee and to the several committees of reference. All the sections so prepared have been sent to press, and are at present in type, undergoing revision. It is hoped that the appendix and the concluding parts of the draft will be ready for consideration early in the new year.

*Public Health Committee.*

Sir JOHN MOORE submitted a report from the Public Health Committee in the following terms:—

The committee had under consideration a formal application which was received from the University of Liverpool asking for the registration of the degree of Master of Hygiene of that University (M.H.). The committee was informed by the Dean of the Faculty of Medicine of the University that the curriculum for the degree of Master of Hygiene extends over two years, and includes all the requirements laid down in the rules of the General Medical Council for Diplomas in Public Health. All the courses of instruction which are required for the Diploma in Public Health are taken by the degree students in the first of their two years' study. In every respect they satisfy the rules of the Council.

The committee recommend the Council to authorise the registration of the M.H. degree of the University of Liverpool as a qualification in public health.

The committee also considered a letter, dated Nov. 8th, 1913, from the secretary of the Royal Institute of Public Health, asking whether, in the opinion of the General Medical Council, that institute is a "recognised medical school," within the meaning of "Rule 3 [or] (2) (f)" of the rules adopted by the Council for Diplomas in Public Health relative to a course of instruction in sanitary law, &c., given by a teacher or teachers in the department of public health of a recognised medical school; and, if not, asking the General Medical Council to add such words to the regulations as will remove any doubt which may arise as to the course or courses of lectures at the Royal Institute of Public Health meeting the requirements of the Council.

It was suggested that after the words "medical school" in "Rule 3: —*Either* (1) (*e*)" and "Rule 3:—*or* (2) (*f*)" the following, or similar, words should be inserted, "or in a recognised public health institution."

The committee resolved to ask the Council to allow it to consult the legal adviser on the question of amending the rules for Diplomas in Public Health as suggested, and on the general bearing of such an amendment or amendments.

On the motion of Sir JOHN MOORE, seconded by Dr. NEWSHOLME, the Council adopted the recommendation of the committee to authorise the registration of the M.H. degree of the University of Liverpool as a qualification in public health.

Leave was accorded to the committee to consult the legal adviser on the question of amending the rules for Diplomas in Public Health as suggested, and on the general bearing of such an amendment or amendments.

*Students' Registration Committee.*

A report was submitted from the Students' Registration Committee.

*Penal Case.*

The Council resumed the consideration (adjourned from the previous day) of the case of Thomas Francis Roche.

Mr. ROCHE gave evidence on his own behalf. He admitted that he had attended both Mr. and Mrs. Stuart as a medical man. Social intimacy had sprung up between his family and the Stuarts. The locality in which they had lived, Dinas Powis, was a small village, and his association with the Stuarts was not due to his professional capacity, and if Mr. and Mrs. Stuart had not been ill the same social intimacy would have gone on. This intimacy was intensely close. At dances and social events they were practically always together.

Mr. HOPE: Take the whole of the payments from the Stuart family how much did you receive?

Mr. ROCHE: About £35.

Mr. HOPE: You say about £35.

Mr. ROCHE: That is including a cheque for £10 which I returned. The amount included some coal which I shared.

Mr. HOPE: That is to say, an average of about 10*s.* a month?

Mr. ROCHE: Yes.

Mr. HOPE: Or about two visits a month?

Mr. ROCHE: Yes. I charged 5*s.* a visit. That would be about twice a month.

Mr. HOPE: Apart from that you were visiting them socially?

Mr. ROCHE: Yes, a great deal.

Mr. HOPE: At any time during this period had you any complaints from Mr. Stuart as to your visits to the house?

Mr. ROCHE: I was always made welcome.

Mr. HOPE: Were you accustomed to drop into the house?

Mr. ROCHE: I was accustomed to step in, in the evening especially, when I thought Mr. Stuart was at home.

Mr. HARPER (cross-examining): I do not understand your line of defence. I understand that professional relationship existed from 1906 to 1911. I understand that increasing social intimacy existed during the greater part of that time.

Mr. ROCHE: Yes.

Mr. HARPER: Is it your plea that your social and professional intimacy was such that you were able to do what you have done?

Mr. ROCHE: I plead that the social intimacy was such that I was able to do so.

Mr. HARPER: And that, then, is your defence.

Answering Mr. BODKIN (the legal assessor), Mr. ROCHE said that there was no medical attendance for the six months previous to his leaving with Mrs. Stuart. He had then sold his practice.

Mrs. STUART also gave evidence, and stated that the incidents which gave rise to Stuart *v.* Stuart and Roche did not arise out of professional relationship.

Mr. HOPE, in addressing the Council on behalf of

Mr. Roche, said that friendship, and friendship alone, was what drew the parties together. The evidence showed that in every way friendship outweighed any medical attendance ever given by Mr. Roche to Mrs. Stuart.

Mr. HARPER said that the defence showed a great misapprehension of the charge which concerned the professional relationship. The attempt to make social intimacy outweigh professional relationship seemed to him quite impossible and hopeless.

The CHAIRMAN (Mr. Tomes) announced the decision of the Council as follows: Mr. Roche, I have to announce to you that the Council do now judge Thomas Francis Roche to have been guilty of infamous conduct in a professional respect, and do direct the Registrar to erase from the Medical Register the name of Thomas Francis Roche.

The Council adjourned.

SATURDAY, NOV. 29TH.

The Council resumed its sittings at its offices, 299, Oxford-street, W. Mr. TOMES, in the absence of the President, again was elected to the chair.

*Penal Case.*

The Council proceeded immediately to the consideration of the case of John Edward Sang, registered as of 330, New Cross-road, London, S.E., L.R.C.P. Edin. 1889, L.R.C.S. Edin. 1889, L.F.P.S. Glasg. 1889, who had been summoned to appear before the Council on the following charge:—

That being a registered medical practitioner you were at the General Session holden at the Central Criminal Court on Sept. 2nd, 1913, convicted of feloniously and unlawfully using certain means unknown with intent thereby to procure miscarriage and sentenced to 12 months' imprisonment with hard labour.

Mr. Sang did not appear, nor was he represented.

Mr. HARPER (the Council's solicitor) recalled the circumstances of the conviction.

The CHAIRMAN (Mr. Tomes) announced the decision of the Council as follows: John Edward Sang having been proved to have been convicted of the felony alleged against him in the notice of inquiry, the Registrar has been directed to erase his name from the Medical Register.

*An Erasure from the Medical Register.*

The Council considered, under Standing Order XVI., 2, the case of Ralph Raby, formerly holding the qualifications of M.R.C.S. Eng. 1903, L.R.C.P. Lond. 1903. Mr. Raby was removed from being a Member of the Royal College of Surgeons of England on April 10th, 1913. His Licence was withdrawn by the Royal College of Physicians of London on Oct. 30th, 1913. The Registrar had been informed by both of the Colleges that the qualification was removed in consequence of the issue of objectionable advertisements, and not on the ground of his having adopted any theory of medicine or surgery (Medical Act, 1858, Sec. 23). The Executive Committee recommended that in pursuance of Standing Order XVI., 2, and the powers of the Medical Act, 1858, the Acting President put from the chair a resolution to the effect that Mr. Raby's name be removed from the Register. The Standing Order XVI., 2, read as follows:—

If, under the direction of the Council, all the qualifications of any registered medical practitioner have been erased from the Medical Register, then the Council shall, if it thinks fit, by formal resolution put by the President from the chair, direct the Registrar to remove the name of such practitioner from the Medical Register.

Mr. Raby did not appear.

The CHAIRMAN said that this gentleman's qualifications had been withdrawn by the bodies who conferred them. He was, therefore, now without qualifications. When the standing order was considered, the legal opinion given by Mr. Muir Mackenzie was that it was not only in the power of the Council to remove the name when the qualification was removed, but that that was the proper course for it to take, provided always that the removal of the qualification was not due to the person concerned having adopted any theory of medicine or surgery.

Mr. HARPER (the Council's solicitor) pointed out that the only matter which the Council had to notice now was whether the person affected had lost his qualification on the ground of his having adopted any theory of medicine or surgery. Each of the Royal Colleges which granted the qualifications in this case had been written to, and they replied that the removal was not on that ground. It was, on the contrary, stated that the qualification was withdrawn for advertising.

The REGISTRAR stated that the advertisement in question had appeared in an Australian paper.

Dr. SAUNDBY: Has notice been given to the practitioner?

The REGISTRAR: A registered letter has been sent to him, and it has been returned through the Dead Letter Office.

Dr. SAUNDBY asked whether the Council could not have the name taken off under another section of the Act.

The REGISTRAR said that if the name was taken off under this section, an intimation was sent to certain of the Colonial authorities.

Dr. NORMAN WALKER suggested that as this was a very rare case it would be wise to put the motion in the words used on the former occasions.

The REGISTRAR said that no such case had arisen since 1886.

Mr. VERRALL thought that if the Council was to review the decision of the Colleges it should have the advertisement before it.

Dr. NORMAN MOORE pointed out that if the Council left the name on the Register it could not leave the qualifications.

At this point, on the motion of Dr. SAUNDBY, the Council considered the case further *in camerâ*.

The CHAIRMAN afterwards announced the decision of the Council as follows: Ralph Raby having been deprived of all the qualifications in virtue of which he was registered, and the Council having satisfied itself that these qualifications were not taken away in consequence of his having adopted any theory of medicine or surgery, the Registrar is directed to erase the name of Ralph Raby from the Medical Register in pursuance of the provisions of the Medical Act of 1858.

*Medical Men and the Signing of Notifications.*

Sir JOHN MOORE moved to amend the Warning Notice relating to "certificates" as follows:—

(i.) In the Preamble to the Notice, after the word "Certificates" insert the words "notifications or documents of a similar character." (ii.) In the list of "Certificates" after (*j*) insert "(*k*) Under the Notification of Infectious Disease (1889) Act, the Infectious Diseases Prevention Acts of 1890 and 1896, and in regard to the Notification of Tuberculosis."

The text of the Warning Notice as to the signing of certificates appears in the report of the Council's proceedings on Wednesday, Nov. 26th.

Sir John Moore explained that there was no provision in the Council's warning notice as to the notification of infectious diseases. It seemed to him that complaints in regard to this matter might in the future be brought before the Council, and it would be well clearly to specify it in the notice. If his first amendment of the notice were adopted the preamble would read:—

Whereas registered medical practitioners are in certain cases bound by law to give, or may be from time to time called upon or requested to give, certificates, notifications, or documents of a similar character signed by them in their professional capacity, for subsequent use either in courts of justice or for administrative purposes.

If the second amendment of the notice were carried the Acts to which it referred would be specifically enumerated.

Mr. PYE-SMITH seconded.

Dr. NEWSHOLME agreed with the principle involved in Sir John Moore's motion, but as a matter of detail he would point out that it did not cover all the Acts dealing with the notification of infectious diseases. Notifications in London were made under a special local Act. Notifications of cerebro-spinal fever were made under a special Order of the Local Government Board. It was therefore desirable to modify the wording suggested by Sir John Moore. He would suggest that the form should be "Acts and Regulations relating to the notification of infectious diseases, including tuberculosis."

Sir JOHN MOORE said that he would accept that form of words instead of his own.

Mr HARPER (the Council's solicitor) observed that the first thing to remember was that these notifications were not certificates at all. They were merely notifications of opinion. That would imply some alteration of phraseology in the warning notice. If possible it might be better to mention the various Acts, because if an Act was not specifically mentioned in the warning notice the practitioner might be apt to think that the notice did not apply to that Act. The mention of particular Acts would strike the mind of the practitioner more vividly than general words would.

Dr. LATIMER pointed out that the difficulty which the Council ran up against in dealing with this matter was that the legislature was always adding fresh Acts requiring certificates and notifications.

Dr. MACDONALD suggested that the Council should pass

the motion in general terms and leave it to the legal advisers to draw up the form of the notice.

Sir HENRY MORRIS did not think that the Council should draw up the notice too generally.

The CHAIRMAN suggested that the Council should take the motion with the modification which Sir John Moore had accepted in regard to the second part, and then refer it to the Public Health Committee with power to act in conjunction with the legal advisers in putting it into shape.

The Chairman's suggestion was agreed to.

*National Health Insurance Act Committee.*

The CHAIRMAN said that the National Health Insurance Act Committee had held a number of meetings this session under the chairmanship of Dr. Langley Browne in the absence of the President. The Committee desired to report to the Council, but circumstances rendered it very inadvisable and in fact impossible to communicate to the public at this stage exactly what the Committee had done and was doing.

Dr. LANGLEY BROWNE remarked that he had intended making much the same statement as the chairman had made. He would now move that the minutes of the National Health Insurance Act Committee should be read to the Council *in camerâ*, and the Council would then be in a position to decide what action would be taken.

The Council accordingly sat for some time *in camerâ*.

When the public sitting was resumed,

Dr. LANGLEY BROWNE moved that the letters which the Council had been considering *in camerâ* should now be read.

This having been agreed to, the REGISTRAR (Mr. King) read a letter which the President had addressed to the secretary of the Joint National Insurance Commissioners. It was in the following terms:—

299, Oxford-street, London, W., March 14th, 1913.

DEAR SIR,—The attention of the Executive Committee of the General Medical Council has been called to a number of communications in which it is alleged that objectionable methods of advertising and of canvassing have been employed in various parts of the country, with the object of procuring the enrolment of insured persons or their dependents as the patients of particular medical practitioners. In some instances it is stated that the advertisements were so framed as to suggest that they were issued with the cognisance of the Insurance Commission or of local insurance authorities; in other instances touting or canvassing for patients is said to have been practised in the supposed interest of Approved Societies and institutions, and of medical practitioners associated with the National Health Insurance service.

The General Medical Council has repeatedly taken steps to inform practitioners themselves of the grave liability they incur by resorting to practices of the kind, and has more than once had to exercise its disciplinary functions in restraint of wilful offenders. It appears, however, to the Executive Committee that some of the local authorities, institutions, and societies concerned with the administration of medical benefit under the National Insurance Act may have acted in ignorance of the principles which guide professional conduct in relation to advertising and canvassing, and have thereby seriously endangered the position of practitioners who are professionally associated with them. The Executive Committee is accordingly of opinion that it would subserve the public interest, and conduce to the proper administration of the National Insurance Act by the bodies in question, were the Commissioners to call the special attention of all Insurance Committees, Local Medical Committees, and Approved Societies and Institutions, to the appended warning notices, which were published by the General Medical Council on June 6th, 1889, and Dec. 1st, 1905, and are still operative.—I am, Sir, yours faithfully,

DONALD MACALISTER, President.

The following is the text of the appended warning notices:—

The General Medical Council considers that, in the interests of the medical profession, it is advisable to bring to the notice of its members certain resolutions which have from time to time been adopted as expressing the views of the Council upon certain forms of professional misconduct which have been or may be dealt with as amounting to "infamous conduct in a professional respect" within the meaning of Section 29 of the Medical Act, 1858. The Council, however, wished it to be distinctly understood that these resolutions are not exhaustive of the forms of professional misconduct which may be dealt with by the General Medical Council under its disciplinary powers, and that the Council is not in any way precluded from considering and dealing with any form of professional misconduct outside the scope or precise language of the following resolutions:—

1. That the Council strongly disapproves of medical practitioners associating themselves with Medical Aid Associations which systematically practise canvassing and advertising for the purpose of procuring patients. (June 6, 1899.)

2. Whereas it has from time to time been made to appear to the General Medical Council that some registered medical practitioners have, with a view to their own gain and to the detriment of other practitioners, been in the habit of issuing or sanctioning the issue of advertisements of an objectionable character, or of employing or sanctioning the employment of agents or canvassers, for the purpose of procuring persons to become their patients, and whereas in the opinion of the Council such practices are contrary to the public interest and discreditable to the profession of medicine, the Council hereby gives notice that any registered medical practitioner resorting to such practices thereby renders himself liable to be charged under the 29th Section of the Medical Act, 1858, with "infamous conduct in a professional respect," and if after due inquiry he is judged by the Council to have been guilty of such conduct the Council may, if it sees fit, direct his name to be erased from the Medical Register. (Dec. 1, 1905.)

The REGISTRAR then read a letter which he wrote to a practitioner mentioned to him in connexion with this matter. The date of the letter was 1913, and its terms were as follows:—

The attention of the Council has been drawn to posters issued by the —— Medical Aid Society, on one of which your name appears in large letters, and in others of which your name does not appear, but advertisements with regard to medical attendance appear. I have been directed to bring to your notice the enclosed letter addressed by the General Medical Council to the National Insurance Commissioners, together with a copy of the warning resolutions it has issued, with regard to canvassing and advertisements. In times past the Council has dealt severely with practitioners who have been proved to have been associated with societies affording medical aid which canvass or advertise for members, and I am directed to draw your special attention to this resolution of the Council in order that you may avoid doing or permitting by inadvertence anything of this nature to which exception could hereafter be taken.

The REGISTRAR read another letter which he had addressed on Nov. 26th to the secretary of the medical aid society with whom the practitioner was connected. Neither the name of the practitioner nor of the medical aid society was divulged. The letter read as follows:—

My attention has been drawn to posters issued by your society on one of which the name of —— appears in large letters, and on others of which, although the name does not appear, advertisements with regard to medical attendance are printed. I have been directed to bring to your attention letters addressed by the General Medical Council to the National Insurance Commissioners and to warning resolutions with regard to advertisements and canvassing, a copy of which I also enclose. I have to point out that any medical practitioner who is proved to have been connected with any society affording medical aid which contravenes these resolutions renders himself liable to be severely dealt with by the Council, and in the interest of any doctor connected with your society it is of the utmost importance that the greatest care should be taken to avoid anything of the nature of the practice referred to, which might lead to a complaint being made against him. I am drawing your attention to the matter, so that your society may not, by inadvertence, do or permit anything to be done to which exception hereafter might be taken.

Mr. VERRALL thereupon moved:—

That this Council urges the Joint Commissioners under the National Insurance Act to exercise their power and influence to prevent the delivering in batches of forms requesting transfer of an insured person to another practitioner, a course which directly leads to the encouragement of canvassing, and to insist upon the obvious intention of the Act that such applications should be made by the insured person on a form obtained by himself from his Local Insurance Committee.

He said that he proposed this motion because the Council would desire to exercise its duty in the direction of guiding medical practitioners in paths of safety rather than in exercising discipline after they had wandered from those paths. The issue of transfers in bulk did directly lead to canvassing and its consequences. He would like to add that he hoped the Commissioners would not suppose that in passing this resolution the Council had any desire to do anything that would hamper them in the course of their work. He hoped also that the Commissioners would, so far as in them lay, desire to coöperate with the Council in carrying out this resolution.

Dr. MACDONALD seconded, and mentioned that in the country there was evidence that the practice which the Council desired to suppress was likely to be a glaring offence unless it was checked.

Dr. LATIMER observed that his attention had also been drawn to the fact that the result of giving these transfers in batches had shown that there was a grave danger that medical men who wished to work the Act in a regular manner would be drawn into the vortex. The object of the motion was to prevent a contingency of that kind.

The motion was carried unanimously.

On the motion of Dr. NORMAN MOORE, Mr. Verrall's name was added to the National Health Insurance Act Committee. It was highly important, Dr. Norman Moore said, that the committee should have all the information possible.

*Conclusion of Session.*

The business of the session being now concluded a vote of thanks was given to Mr. Tomes for his services in the chair.

The CHAIRMAN thanked the members for the consideration which they had shown him.

The Council then rose.

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ERRATUM.—In our issue of last week, p. 1589, the first of the two practitioners whose names were restored to the Medical Register should have been James Williamson Skelley, and not as printed.

THE LANCET.

LONDON: SATURDAY, DECEMBER 6, 1913.

## The National Insurance Act: The New Draft Regulations.

THE National Insurance Act was passed in circumstances which precluded criticism and alteration of its provisions in detail, and as the Bill originally drafted on behalf of the Government had been framed without any consultation with representative members of the medical profession the natural difficulties which might be expected to impede the smooth working of any measure of such comprehensiveness were greatly, we might say incalculably, increased. The Insurance Commissioners, under the very extensive powers given them, made Regulations necessary for the administration of medical benefit by the newly formed machinery, and before anyone had become sufficiently familiar with the process of working for their merits or defects to be fully appreciated either by Insurance Committees, or by the medical men who entered into agreements under them, the Insurance Act, 1913, introduced amendments and additions to the principal Act which required, or at all events have produced, a fresh set of draft Regulations and agreements. The Regulations have been published, and are to come into force early in January, 1914.[1] The publication can be purchased so cheaply that we may take it for granted that all our readers have a copy.

It has occurred to some that the postponement of the making of new Regulations even for a brief period might have enabled them to secure general acceptance as representing the views of the profession so largely interested in them; but as matters now stand the time allowed for criticism of points in them likely to produce friction and dissatisfaction is short in the extreme. That they should excite adverse criticism is almost inevitable owing to the manner in which the original Act was passed, after having been initiated, as we have pointed out above, without any attempt to secure the concurrence of the medical profession, upon whose members the burden of rendering it workable and effective was to be thrown. When the measure was in Bill form it was immediately and unceasingly pointed out that it provided flat rates of insurance and of payment for medical benefit for an enormous section of the population, one part of which had before paid little or nothing for medical treatment, but another part of which had paid contentedly the fees asked by their medical attendants and had received attendance in return, precisely as do wealthier members of the community who pay fees proportionate to their means. These private patients now brought under the Insurance Acts have in many instances placed themselves upon the lists of practitioners on the panels, but at the same time some have desired to pay extra fees for treatment upon their former footing as private patients rather than join the throng of panel patients. Medical men on the panels have met their wishes, and it has not been shown in any case that worse treatment from a medical point of view has been the result for those not paying extra fees. But in response to a feeling that here there was room for abuse, in the new draft agreement between medical practitioners and insurance committees there is the proviso:—

2 (ii.): The practitioner shall not accept any fee or other remuneration in respect of treatment which he is required to give under this agreement, except as provided in this agreement.

This clause has given dissatisfaction to practitioners,[2] who honestly and honourably have treated all their patients to the best of their ability, whether receiving an extra fee or not, in panel practice. The East Suffolk Insurance Committee have endorsed the view that the word "accept" should be replaced by "demand," and in some places medical service may be hard to get unless this change is made. Doubt has existed whether under the Insurance Acts as they stand the Commissioners could lawfully sanction any extra payment by panel patients being either asked for or even accepted, for the fact of it being accepted would always lead to the suggestion that it was asked for, and that the consideration offered was better medical treatment. The Commissioners, however, are clearly willing to take a broad view, for in response to representations made by the Kent and Surrey Insurance Committees they have indicated that the clause quoted above does not preclude a practitioner from entering into an independent agreement with an insured person, if the insured person understands what are his rights under the Act and himself makes the request for individual attention.

Another issue, of a somewhat different nature but also connected with the admission to insurance of persons able to pay for their own treatment, arises out of a Regulation dealing with the powers and duties of the newly constituted panel committee. This has been added to a long list of committees dealing with questions affecting the medical profession, local medical committees, medical benefit subcommittees, sanatorium subcommittees, medical service subcommittees, joint service subcommittees, and district medical committees. The Regulation referred to gives to panel committees, but not to local medical committees, authority to dispute the right of any insured person to receive medical benefit on the ground that his income is in excess of the limit. There appears to be no reason why members of a panel, who to some

[1] Draft Regulations, National Health Insurance (Medical Benefit), England, 1913. Wyman and Sons, Fetter-lane, London, E.C. Price 3½d.

[2] See THE LANCET, Nov. 22nd, p. 1507.

extent are interested in keeping patients on the insured list, should be allowed this right, and that those whose interests may lie in the opposite direction should be denied it. The question of medical service for temporary residents, who constitute a body of patients containing many with no very fixed abode, will for some time be one upon which medical practitioners will not be unanimous. The new agreement fixes the system of payment by reference to a schedule appended to the Regulations, so as to provide for medical attendance upon all temporary residents being on the basis of "case value of persons on panel lists." The penalties to be inflicted upon a medical man, upon an adverse report being made by the medical service subcommittee after investigation of a complaint made by a patient, have received an important addition. An insurance committee is now to be able to transfer any patient from the list of one medical man to that of another on the patient's application and without further inquiry, if the committee is satisfied that the medical man from whom the transfer is to be made has too many patients on his list to be able to give them adequate treatment, or that his conduct has been such as to afford grounds to those on his list for desiring to be removed from it. All this gives a power of arbitrary action to insurance committees which is open to considerable objection, and those most sincerely anxious to see the Act working smoothly cannot but regret some of the provisions.

Another penalty takes the form of deductions, to be made under a clause in the new agreement, from the money due to the practitioner. These deductions may be made in respect of expenses or loss incurred by the committee owing to any breach by the practitioner of his agreement. The comprehensive nature of these penalties and the powers which they give to insurance committees to exercise disciplinary functions over the medical men upon their panels can only be justified on the ground that the panel patient has no other remedy open to him except that of complaining to the insurance committee. If an action can be brought by the patient, as in the case of TITHERINGTON *v.* DUNLOP, there can be no reason for increasing the powers of committees to deal with complaints and to exact penalties. If such actions as that referred to are precluded owing to the fact that the medical man's contract is with the committee only, the case is admittedly different, and it is to be regretted that one or other of the Insurance Acts should not have placed the question beyond dispute. We have referred only to what appear to be the principal objections raised with more or less force, and more or less generally, to the Regulations which are still draft Regulations, and therefore capable of modification. The Commissioners are showing willingness to give attention to representations having the support of a large body of medical opinion, and in any case the Regulations now proposed are not likely to be final. It is to be regretted that finality does not appear to be at present attainable. But the difficulties under which we now chafe are very real, and the feeling against contract practice, always existent, has during the last week given great evidence of vitality.

## The University of London: The Organisation of Advanced Medical Studies.

THE Departmental Committee of the Board of Education who are now engaged in considering the Final Report of Lord HALDANE'S Commission on University Education in London have been for several weeks steadily progressing with their task, and nothing shows more clearly how difficult that task is than the misapprehensions, not only of the public, but of medical men directly interested in the questions at issue, of what the work of the Departmental Committee is. And yet the Government have made the matter perfectly clear. The work of the committee is to report to the Board of Education in what way—of course with alterations in detail, necessary compromises when face to face with conflicting and coequal interests, and so on—the Final Report of the Royal Commission can best take shape as an Act of Parliament. The Departmental Committee cannot, for example, choose a central site for the University any more than they can find the money to pay for it, or definitely arrange the terms of purchase; but in any advice they may give on the matter they do not have to take into account the desirability of the University possessing a central site, for that is one of the things that have been settled by the Royal Commission, to whose findings they are endeavouring to give effect.

The remarks of the report of the Royal Commissioners with regard to the matter of a central site affect the whole University, and the Faculty of Medicine, with which we are mainly concerned, is interested in them like all the other faculties; but the Commissioners found in considering the Faculty of Medicine certain special difficulties which should render the assistance of the Departmental Committee of particular value to the Board of Education. The Departmental Committee will be engaged shortly in conferring with representatives of the hospital schools. In these conferences the practical difficulties of carrying into effect, even in a partial way, the changes advocated in the Report of the Royal Commission will no doubt be thoroughly discussed and consideration given to the question of how far they can be overcome. In connexion with advanced medical studies, the Report of the Royal Commission advocates two main changes. First they advise the introduction into a limited number of colleges and hospitals, as an addition to the clinical teaching, of the organisation which has been called the "hospital unit," by

which a clinic, comprising a sufficient number of beds, with an out-patient department, clinical laboratories, and an army of trained assistants placed under the charge of a professor appointed by the University, is to be established. Secondly they advise the complete incorporation into the University of the medical schools attached to certain of the metropolitan hospitals in which such University clinics are to be formed. It is suggested that there should be three such Constituent Medical Colleges. The whole spirit of the Report is that every student should be qualified by previous education for University studies, should be admitted as an undergraduate without any need for special preparation, and once within the University should have a systematic education at each stage of his career. In short, the Royal Commissioners aim to make the Faculty of Medicine comparable in every way to other faculties, though they have recognised, we may be certain, that in any University a faculty of medicine must possess certain special features. The nature of medical science, its dependence upon the coöperation of other branches of science, and its necessary relations with institutions which have charitable and social sides quite apart from their scientific side—all these things make the organisation of a medical faculty a complicated matter. In London, also, the appointment of professors, assistant professors, and readers must be a particularly delicate affair. The Commissioners find that the instruction as at present given in the wards and theatres of the hospitals having medical schools attached to them is not, at any rate in some cases, of what might be called professorial value. A consulting surgeon, physician, or gynæcologist who is so largely engaged in the practice of his profession that he has no time either for the systematic educational duties that should go with a professorial chair, or for the initiation and organisation of medical research, is not found by the Commissioners to be an adequate professor. Of the high practical value of clinical experience there are nowhere two opinions, but so convinced are the Royal Commissioners that more than this is required that they propose to appoint a certain small number of professors in medical subjects, who being in receipt of salaries and aided by assistants, shall undertake to forego, within limitations, all forms of private practice.

How are such professors to be chosen? In London we have 12 medical schools, each providing an enormous amount of clinical material. While the extravagance is very great of maintaining in one city 12 separate centres at each and all of which a complete university medical curriculum may, somewhat theoretically, be obtained, the possession of these 12 centres from which to choose professors can be found to have its convenience. The recommendation of the Royal Commissioners to which in spirit the Departmental Committee will have to give effect is that the University should obtain financial and educational control of one or more medical schools attached to a general hospital; three are suggested, and these would become Constituent Medical Colleges of the University. It would almost automatically follow that the professors of medicine, surgery, and obstetrics would be chosen from the staffs of those three schools. Now while all must admit that it would be impossible for the altered University of London to absorb the whole of the London medical schools, maintaining them to do their present work with its high rate of efficiency in some directions and its deviations from academic or university standards in others, it is also clear that the selection of any three schools as the only schools of the University would give rise to painful feelings, while, incidentally, the limit of the choice of professors, assistants, and teachers to those three schools might have inconvenient results for the University. For it must be remembered that the professors, and not only the professors but any assistant professors, readers, and associated instructors, will not, at any rate in the first instance, be very easy to find, and it may be that the men who would most naturally recommend themselves for such posts would not all of them be able to make the pecuniary sacrifice involved, when the larger area of choice furnished by 12 medical schools would certainly become invaluable.

In considering what is the most practicable solution of the large problem now before the medical teachers in London there are certain broad principles which must not be lost sight of. In the first place, there is a general consensus of opinion that the present system of clinical teaching is admirable in its working and has produced excellent results in the training of the undergraduate students as a whole to become sound practitioners of their profession. Clinical teaching in London has attained a high degree of efficiency, largely as the result of the system of appointment of dressers and clinical clerks which is particularly a British feature. Under this system the clinical teachers and the students have free access to the hospital patients at all reasonable times, and the number of students appointed as dressers and clinical clerks is sufficiently small to permit each student to have the fullest opportunities for the examination of the patients allotted to him, and to come into close personal relations with his teachers. Throughout the evidence on this question given before the Royal Commission, the necessity for retaining unimpaired this distinctive British system was emphasised by practically all the witnesses, even by those who advocated most strongly the institution of University professors of the continental type. In a German "klinic" the distinctive feature is the professor's daily clinical lecture or demonstration, consisting of an elaborate demonstration of cases, the details of which have been worked up previously by a number of assistants. These demonstrations are given to large classes of students, who, as individuals, have practically no opportunity of examining the patients. This method of teaching by organised clinical demonstrations has been used

to some extent in this country in hospitals in which there is a disproportion between the supply of clinical material suitable for teaching and the number of students. It has been often tried in medical schools in London, but without any marked success. There can be no doubt regarding the superiority of the British system of appointing clerks and dressers, supposing that a choice has to be made between one system and another, and any proposal to substitute for it clinical demonstrations of the continental type is not calculated to benefit the training of medical students. The Commissioners themselves recognise the importance of the distinctively British method of clinical teaching, which, they say, should not be abandoned or superseded. It may therefore be accepted as a first principle that nothing should be done which will destroy or impair it. The main business of a university is the training of its undergraduates, but the function of adding to the sum total of knowledge by promoting research is hardly less important, and no centre of medical education can continue in the first rank unless, in addition to the excellence of the training which it provides for undergraduates, it also is producing new work. A great deal of research is being carried on at the present time in the wards and laboratories of our metropolitan hospitals, but such research is the result mainly of individual effort, and is hampered by lack of time on the part of would-be researchers as well as by considerations of expense. To give the proper stimulus to research the great things needed are money and organisation. The appointment of University professors and the introduction into the London medical schools of the "hospital unit" organisation on the continental plan would not provide any new and improved method of clinical teaching for the ordinary undergraduate. On the other hand, by the endowment and organisation of research, undoubted advantages would result, for it is mainly in the organisation of research that the continental plan is superior to ours.

Now it must never be forgotten, and the Report of the Royal Commission did not forget it, that medical education must of necessity be largely utilitarian. Yet it is highly desirable that the teaching should be given in a university atmosphere created "by a community of workers devoted to the pursuit of knowledge for its own sake and tenacious of this ideal against all external pressure of material and social advantages." Such a university atmosphere can only be produced when there is close association between teaching and research, and to some extent it now exists at any rate in our advanced hospital schools. The improvement of this university ideal is the main advantage which would accrue from the appointment of university professors in the clinical subjects. The problem is how to obtain the university ideal with the least possible disturbance of existing conditions and without impairing the present methods of teaching. The Royal Commissioners recommend that when adequate funds are available the University of London should assume the educational and financial control of not more than three of the medical schools. Arrangements would be made with the governors of the hospitals to which these schools are attached for the appointment and endowment in each hospital of three professors—viz., in medicine, surgery, and gynæcology—each with a hospital unit under his charge. Certain objections to this scheme we have indicated. Apart from the difficulty of reconciling the interests of the university, which are teaching and research, with those of the hospital governors, which are primarily the treatment of the sick poor, other objections have to be met. Three such units would require about 200 beds, and only a very large hospital could afford to provide these and still have sufficient for the adequate preservation of the present clinical system. Another grave objection would be the sharp cleavage of the London medical schools into two classes—the three incorporated ones receiving only university students on the one hand, and all the others receiving mainly conjoint board students and having no university professors on the other. If the hospital unit organisation is a good one, why should the advantages of the university influence be limited to three hospital schools, and the extent of the clinical material now available to the university be deliberately curtailed? These objections could be overcome to a large extent by distributing the professors over all the medical schools, or so many of them as can provide instruction in conformity with the university ideal, and any school which can do this might be encouraged in every way. The appointment of one or more professors in each of the schools would be the means of organisiug research and creating the university atmosphere with the least disturbance of existing methods of training. These professors ought to devote their energies entirely to the organisation of research and the giving of teaching of an academic type. The technical part of the education of the ordinary undergraduate should be left mainly in the hands of the present clinicians, upon whose teaching the work of the professors would react beneficially. We understand that this view that the professors should be distributed among the medical schools and not concentrated into three constituent colleges received the practically unanimous support of an important and largely attended meeting of the Medical Faculty of the University on Monday last, and such a weighty expression of opinion must have its effect with the Departmental Committee in considering the measures which are immediately practicable.

ROYAL UNITED HOSPITAL, BATH.—The annual meeting of the Ladies' Working Association in connexion with the Royal United Hospital was held on Nov. 27th under the presidency of the Mayor (Dr. Preston King). The report showed that during the year, 1351 articles of clothing valued at £200 had been given to the institution.

# Annotations.

"Ne quid nimis."

## A BRITISH RADIUM STANDARD.

THE authorities of the National Physical Laboratory at Teddington have taken an important step. They have secured a British radium standard, which has been certified by the International Radium Standards Committee, after comparison with the international standard prepared by Madame Curie. This standard is a preparation of 21·99 milligrammes of pure radium chloride obtained in Madame Curie's laboratory. The National Physical Laboratory is now in a position to undertake the standardisation of radium and mesothorium preparations by comparison with the standard. Particulars as to the methods of testing of specimens have been issued, together with a statement of the cost of undertaking such inquiry. We understand that for the present the testing of specimens will be restricted to the use of methods depending upon the measurement of the penetrating gamma rays: tests on radio-active minerals, waters, and the like, which are generally of feeble activity, will not be undertaken. A certificate will be granted in accordance with the findings.

## THE MULTIPLE USES OF SUGAR.

IT is not widely known that sugar has in the industries many valuable applications which have nothing to do with its rôle as an aliment. The fact that sugar is a cheap carbohydrate containing a rich proportion of carbon, and that it acts in some cases as an acid, forming definite and soluble compounds with the bases, renders it a useful agent in certain industrial processes. It is, for example, the foundation of common boot blacking. It gives a smooth, silky "char" when heated with sulphuric acid. If the acid is neutralised and the mixture converted into a paste it gives the familiar shine when applied with a polishing effort to the leather boot. To some extent such paste has been replaced by wax and fluid polishes, but the old blacking made from sugar is regarded by many authorities as holding its own both as a polisher and preserver of the leather. Sugar is also employed in the manufacture of leather in order to remove the lime used as a scourer of the hides, while in the tanning process glucose is largely used as a "filler"—that is, a vehicle or carrier. Its affinity for the alkaline earths—e.g., lime—accounts for the use of sugar in removing and preventing boiler-scale. Sugar enters largely also into the composition of copying inks, and printers' rollers are made up of a mixture of glue and glycerine or sugar. It is used also as a cheap substitute for glycerine or alcohol in the manufacture of transparent soaps. It excludes those constituents in soap which make for opacity. Sugar, again, forms nitro-compounds, and hence a series of explosives owe their potentialities to the association of sugar with nitric acid. For a long time sugar has been employed as a hardener and strengthener of cements, and to this day is mixed with mortar to give it permanently hard qualities. Plaster is similarly treated with the same object. Some of the most ancient masonry of the world has been found to contain very appreciable quantities of sugar. The world thus owes a debt to sugar quite apart from its merits dietetically or as a preservative of foods. Its function as a preservative is not less important than its value as a nutritive. It is further of interest to point out that sugar, apart from being directly a food, serves to stimulate the flow of the gastric juices, and so acts in a way which recalls the action of soups or meat extracts. The use of sweet liqueurs after dinner may have some foundation in this physiological fact. As is well known, however, an excessive indulgence of sugar may lead to irritation of the mucous membrane of the stomach and to the flow of a strongly acid gastric juice, in which case sickness is commonly a sequel. All these considerations are interesting as illustrating the number of ways in which sugar serves, apart from that of being a direct nutritive in the common dietary.

## A HOSPITAL AND A GRAVEYARD.

Now that King's College Hospital is in the hands of the house-breakers, after being emptied of everything moveable, even to a batch of melancholy old coffins, a page in the history of Central London has been definitely turned down. The social historian, as well as the civic antiquarian, must regard this turning with something of a sigh, however much hygienists and hospital reformers may have just cause to rejoice. For was it not close to a King's College Hospital, if not this particular building, that lay the churchyard through the gateway of which "Jo," in "Bleak House," was wont to gaze before sweeping the gateway steps with his broom? The churchyard probably presented a gruesome spectacle 60 years ago, when Dickens published his famous romance of the Lincoln's Inn Fields neighbourhood. Bones had a way of occasionally protruding from graves. There were awful odours, and people in adjoining houses, where offices now stand, are said to have died from fevers, engendered by what was really a corpse pit. There is a tradition that one of the plague-pits of the year 1665 was situated here. Be that as it may, there can be no doubt that this churchyard, in common with many others in the metropolis, was fearfully overstocked before John Simon, an old King's College Hospital surgeon, and Edwin Chadwick promoted the agitation which led eventually to extramural burial. In the minutes of evidence of the select committee on Improvement of the Health of Towns, which sat in 1842, many questions were asked regarding the healthiness or otherwise of a hospital next door to a graveyard, and Colonel Fox, one of the Commissioners, remarked, "I am sorry to see that such a place is used as a hospital, for I think it is very improper." A witness told an anecdote of the Bishop of London having been present, on his own admission, at a funeral in the City where 13 skulls had been thrown up from the grave. He added that as many as 500 skulls were thrown up in one day in the graveyard next to the King's College Hospital, and that the gravedigger had amused himself by chalking their number on a wall. During the course of the inquiry, however, Dr. Todd showed that no disease in the hospital was traceable to the proximity of graves. The old hospital building had been the Strand union workhouse before 1839, and the building now being destroyed was not erected until after the "Bleak House" epoch—that is, until 1861. Still, the latter building carried on many traditions of the older and humbler house which

must have been familiar to Dickens. It was a hospital, at any rate, whereas now offices or other lay buildings will take its place.

## THE SOCIETY OF TROPICAL MEDICINE AND HYGIENE.

AT a meeting of the council of the Society of Tropical Medicine and Hygiene held on Nov. 21st, an announcement was made concerning the ballot of the Fellows of the society on the proposal to amalgamate with the Royal Society of Medicine, the result being 60 in favour of amalgamation and 216 against. Thus by a large majority it has been decided that the Society of Tropical Medicine and Hygiene shall remain as hitherto an independent society. This question has been most carefully considered during two successive years by the council who are responsible for the management of the affairs of the society, and on each occasion it was decided with practical unanimity that it was contrary to the interests of the society to agree to the proposed amalgamation. On the second occasion, however, it was decided to refer the matter for decision by a referendum of the Fellows, this being decided upon at the annual meeting on June 20th, 1913. Sir John Kirk and Sir William MacGregor were elected honorary Fellows. Fourteen new Fellows were elected at the ordinary meeting of the society on Nov. 21st, and 32 names were nominated by the council for election at the next meeting of the society. All medical men interested in tropical medicine are warmly welcomed as Fellows of the society, and the secretaries will be glad to give information to any who desire further particulars if they will write to them at 11, Chandos-street, Cavendish-square, London, W.

## ABDOMINAL PAIN AFTER VACCINATION.

THE recent epidemic of small-pox in Sydney which has been described by our Australian correspondent, caused so much anxiety that people were vaccinated in large numbers. A sequel of vaccination which appears to have previously been unobserved—abdominal pain—has been described in the Australian medical journals by several writers. Its recognition is important in order to avoid diagnosing some acute abdominal condition. In the *Australian Medical Journal* of Sept. 6th Dr. D. Murray Morton, senior surgeon to St. Vincent's Hospital, has published a paper on this sequel which has occurred, he says, in a definite percentage of cases and in the practice of many Sydney practitioners. It usually begins in the third week after vaccination as a severe pain deep in the epigastrium. It may be associated with vomiting. After some hours the pain settles in the back in the mid-dorsal region and is persistent and agonising. It is aggravated in the recumbent position, so that the patient prefers to sit up, stand, or even walk about. Its severity is such that if its cause is not suspected biliary colic, acute appendicitis, or other grave abdominal condition may be diagnosed. In one case, which Dr. Morton saw in consultation, the condition of the patient seemed so alarming that a high intestinal obstruction had been suspected. Sleep is impossible partly from pain and partly from extreme restlessness. Once aware of the occurrence of this sequel the diagnosis is not difficult. The symptoms and signs do not conform with those of the ordinary abdominal conditions. The pulse is rather slowed than quickened, the abdomen remains soft, and there is no definite tenderness. The early transference of the pain from the abdomen to the back and the restlessness make a characteristic picture quite unlike that of any acute abdominal condition except biliary colic. The nature and distribution of the pain bear a close resemblance to the gastric crises of locomotor ataxy. The only means of giving substantial relief is the administration of a full hypodermic dose of morphine, and to repeat it if necessary. After three days relief is almost complete, although slight pains in the back are not uncommon. Out of about 1300 vaccinations performed by Dr. Morton or under his control abdominal symptoms occurrred in ten. In three cases the symptoms were severe and distressing. All occurred in adults who previously had been vaccinated successfully. Dr. Morton does not give any explanation of these pains. It may be suggested that they are the analogue of the backache of variola.

## TUBERCULOSIS NOTIFICATION.

A CORRESPONDENT, who is chairman of the finance committee of an important district council, has directed our attention to the frequency with which notification payments have to be made from the rates to different medical men in respect of the same case of tuberculosis. The local practitioner, he states, often sends the patient to a consultant who also notifies the case, while frequently also another notification may be received as a result of the patient having gone independently to a hospital for treatment. Our correspondent expresses a natural anxiety, not only at the apparently wasteful expenditure thus arising, but also as to the effect which the receipt of so many duplicate or triplicate notifications may have on statistics of the prevalence of tuberculosis. It seems clear from the terms of the Public Health (Tuberculosis) Regulations, 1912, under which notification is made, that multiple notifications are fully authorised, and by the nature of the disease are necessary if the object of the regulations is to be achieved and all tuberculous cases are to be brought to the knowledge of the medical officer of health of the district in which the patient lives. The regulations state merely that the practitioner is not bound to notify if he has reasonable grounds for believing that the case has already been notified. Unless the second practitioner has some facts to go upon he cannot escape his obligation to report. It is well, however, that the natural objection to paying for repetition of information already obtained should be borne in mind, and we may invite our readers to discuss the possibility of adopting a line of action which would help to meet this objection while conforming with the official requirements. One or two suggestions, for example, occur to us. In modern practice there is seldom advantage in concealing the fact of tuberculosis from the patient, who in ordinary circumstances must know of his tuberculous condition sooner or later if notification is sent. Consequently the practitioner notifying a case of tuberculosis might well make it a habit to tell the patient that he is doing so, and to whom the notification is going; and also before notifying any case he could inquire, as a matter of routine, whether tuberculosis has been already diagnosed and notified to the medical officer of health of the place where the patient is living. General observance of this practice should, we

think, lessen duplication. It might also be well that the practitioner who merely suspects tuberculosis in a case which is forthwith to be sent to a tuberculosis dispensary or to a hospital for special observation should not meanwhile notify it at all. As regards the effect of multiple notifications on statistical work, we do not think our correspondent need fear that the effect of duplication is likely to be neglected in the preparation either of local or national figures. The elimination and codification of duplicates already receive close attention in the offices of sanitary departments. Comparisons of one district with another in respect of the rate of notified tuberculosis would not ordinarily be made by any prudent medical officer of health without inquiry as to the corrections made for multiple notifications, while if for some special statistical purpose such crude figures were used, the uncertainty introduced by the absence of correction could hardly fail to be pointed out.

## THE SALE OF COCAINE SNUFF.

A CASE was heard before the Birmingham stipendiary magistrate last week in which a joint stock company carrying on a chemists' business was summoned, at the instance of the Pharmaceutical Society, and fined for selling a preparation of cocaine without labelling the package "Poison" and without observing certain other conditions imposed by the Pharmacy Acts in connexion with the sale of scheduled poisons. The chief inspector under the Sale of Food and Drugs Acts for West Bromwich, who gave evidence, said it was possible to obtain a bottle of cocaine snuff from tobacconists and licensed victuallers in the town. This revelation is somewhat disturbing, but it is to be hoped that the practice will cease now that the attention of the tobacconists and licensed victuallers concerned has been called to the fact that the sale of cocaine snuff by them is not only illegal but is fraught with considerable danger to the public. If at any time the Pharmacy Acts should be amended in such a way as to create a group of poisons to be sold only on the order of a medical practitioner cocaine is obviously a substance which should be included in the group. In the meantime the sale of cocaine and its preparations is by law restricted to chemists, and no compound containing 1 or more per cent. of cocaine may be sold to any person who is not known, or introduced, to the seller.

## MALARIA AND AGRICULTURE.

IN this age of experimental science there is a tendency for the knowledge derived from mere observation to be overlooked or even discarded. Observation for years has associated certain conditions with certain diseases, and causation theories, often vague and indefinite enough, have been founded thereon. Then comes some new light on the subject of the causation of the disease which is clearly established by experimental investigation, and because the theories formerly based upon the observation of the past are thus proved to be entirely fallacious the tendency is to ignore or discard the observations themselves. And yet these observations when approached from an entirely different point of view may sometimes not only be shown to be absolutely correct, but may even indicate ways in which the later experimentally proved knowledge may be widely extended in its application. An interesting example of this was afforded by the investigations into the relations between malaria and agriculture of Dr. Malcolm Watson, of the Federated Malay States, detailed recently by him before the Royal Colonial Institute in a paper on the Prevention of Malaria: its Relationship to Agriculture. Malaria has for ages been known to be connected with swamps and to be reduced by drainage and cultivation. Again, in some places flooding a swamp actually improved health, while in others drainage and turning up the soil induced serious outbreaks of disease; yet in some regions it was found, not in the swamps, but in the hills and dry sandy deserts. Dr. Watson, following up the line of investigation begun in the Malay States, made a personal inspection of the malarial districts in North Sumatra, Panama, British Guiana, and Barbados. The upshot of his observations is, in brief, the working rule that pool-breeding mosquitoes can be abolished by open drainage, while stream-breeding mosquitoes, some of which are also malarial carriers, necessitate subdrainage for their destruction. The principal hill mosquito is Anopheles maculatus, and it was found that wherever it was present hill malaria existed, but not where it was absent. The observation, therefore, that cultivation of low-lying swampy lands diminished malaria, but did not necessarily do so in the high-lying districts where it existed, was thus both proved and explained. By putting the streams underground for a certain distance round the habitations in the hill districts the malaria was subdued.

## THE MOUNT VERNON HOSPITAL CONTROVERSY.

ON July 12th last we printed letters announcing the resignation of the large majority of the honorary medical staff and of the resident medical superintendent of the Mount Vernon Hospital for Consumption and Diseases of the Chest. In our issue of Nov. 22nd we published a letter from Mr. C. Johnston, chairman of the committee of management of the hospital, traversing some of the statements made in our columns by members of the consulting and visiting staffs, and defending the policy of the lay board of which he is the head. This week we print a long letter in reply from Dr. F. W. Tunnicliffe and Dr. A. J. Whiting, which is in effect a categorical account of the circumstances which led to the resignations referred to above, and an indictment of the course pursued by the committee of management. In view of the gravity of the situation, these *ex parte* statements published in our columns demand the closest attention of our readers. The charges brought against the lay board of the Mount Vernon Hospital by Dr. Tunnicliffe and Dr. Whiting are briefly as follows: (1) That they refused to meet the medical board in conference upon matters of vital importance to the institution; (2) that they arbitrarily dismissed the two junior physicians; and (3) that they failed to make an official offer of beds at Northwood to the senior physician, in contravention of an understanding entered into by them four years ago. It is not in dispute—although this matter was not touched upon by Mr. Johnston in his letter—that the present deplorable state of affairs is largely due to acute differences of opinion between the lay and medical boards upon the necessity or otherwise of giving up the hospital at Hampstead and of concentrating the resources of the hospital, on a different footing,

at the Northwood Sanatorium. With regard to this aspect of the controversy we would refer our readers to an article in THE LANCET of March 1st last, which summarised the difficulty as it then stood and set out in detail the point of view of the medical staff. Things have changed since then, but even if the lay board were justified in abandoning the Hampstead building it does not appear from the correspondence published by us that their treatment of the medical staff has been correct, and a strong impression remains that they have brought this trouble upon themselves. We hope it is not now too late for an amicable settlement; as matters stand at present the interests of an institution which has done excellent work in the past are seriously threatened.

## DENTAL CARIES AS A CONTAGIOUS DISEASE.

UNDER the title of "The Conquest of Caries" there appears in the *British Dental Journal* of Nov. 15th an article in which the author, Mr. William H. Jones, gives an interesting account of the progress of the Dental School Clinic which was established at Cambridge through the generosity of Mr. Sedley Taylor. The figures given by Mr. Jones indicate that there is a definite improvement in the general condition of the children from a dental point of view. It is, however, a curious fact that nowhere in the report is there any reference to the relation of nasal obstruction to the amount of caries or the general condition of the mouth. Again, there are no very accurate figures on the percentage of children showing a marginal gingivitis—figures which one naturally expects to find in any statistics of school clinics where the recent authoritative teachings of dental surgery have been assimilated. In the paper there is a statement that dental caries is a contagious disease. Much caries has been shown to be a disease due to the stagnation of carbohydrate food about the teeth, the fermentation of the stagnant carbohydrates resulting in the formation of lactic acid. In the various investigations made by trustworthy observers there has been little or nothing brought to light supporting the theory of contagion. The author's conclusions are apparently based on the following observations:—1. That in the new patients examined there is a lessened incidence of caries. 2. That these new patients are in the majority of cases the younger brothers and sisters of children who have been treated in previous years. "They consequently live in homes and work in schools where the amount of oral sepsis has been enormously lessened in the last five years. In consequence these younger children breathe a better atmosphere, probably more especially when asleep, and they eat off plates and drink from vessels less liable to be contaminated, and are consequently less liable to be influenced adversely by any infantile contagions." 3. The minimum amount of treatment prevents advance of caries in a given mouth. 4. "The decay in the second temporary molars appears to be responsible for much of the decay in the first permanent molars, so much so that the extraction of a decayed second temporary molar is frequently performed as a conservative act in connexion with the scheme." Mr. Jones then says that "if it be admitted that decay can spread from tooth to tooth in a mouth, or be prevented from doing so, then it appears reasonable that decay may also spread from the teeth of one individual to those of another." Now, an axiom in the prevention of caries is that the mouth must be functional, and to be functional (1) the teeth must be free from tenderness so as to allow mastication without pain; (2) there must be nasal breathing. The absence of either of these conditions results in the formation of stagnation areas and liability to caries if the food lodging around the teeth be a carbohydrate. Consider the author's observations by the light of the functional mouth and what do we find? To take the last observation first, a carious second deciduous molar, being a functionless tooth, will lead to the formation of stagnation areas in its immediate neighbourhood and also around the opposing teeth. The first permanent molar is approximal to the second deciduous molar, hence this tooth is involved, and if the carbohydrate food is present in the stagnation areas caries follows. Remove the carious, tender, deciduous molar, functional activity is restored, and food does not lodge. Take the observation that the minimum amount of treatment prevents the advance of caries—this is due, again, to the removal of tender areas of mastication, restoring functional activity. The observation of the decrease of caries in families is far more rationally explained on the lines of increased attention to dental hygiene. If due to the lessening of contagion one would expect it to be general throughout the family, but it is the common experience of practitioners to find one child more affected with caries than the other, and inquiry soon elicits the fact that oral hygiene or neglect of the rules of dietary is the cause. The verdict to be passed on the author's assertions is certainly "not proven," and, taking all the facts that are known relating to caries we are inclined to consider it should be "not likely." The plan for the conquest of caries does not, we think, lie in approaching the disease as one due to contagion, but rather as one due to stagnation of carbohydrates. Preventive treatment along the latter lines has led to most hopeful results.

## THE RADCLIFFE INFIRMARY, OXFORD.

WITH the opening of its new wing on Nov. 26th, which was briefly reported in our last issue, the Radcliffe Infirmary and County Hospital, Oxford, entered upon a fresh chapter in its history. The Chancellor of the University, Lord Curzon of Kedleston, who performed the ceremony, showed himself well acquainted with the origin and growth of the institution and with its importance as a centre of medical teaching and research. His presence added much to the interest of the occasion, and emphasised, if that were necessary, the close connexion which exists, and has always existed, between the infirmary and the University of Oxford. Having pointed out that the business upon which they were engaged that afternoon had been made possible by the benefactions of two medical men, Dr. John Radcliffe and Mr. John Briscoe, the Chancellor touched lightly upon the oblivion which has befallen the personality of many of those whose names survive in buildings and endowments. Of Mr. Briscoe's bequest of £63,000, which came to the hospital at his death in 1908, £15,000 have been devoted to the present extensions, and £9000 have been subscribed for the same purpose by the public. The new buildings comprise out-patient and casualty rooms, accommodation for special departments, and admirably designed and equipped laboratories for clinical pathology. These latter Lord Curzon rightly called the principal feature of the extension,

enabling the hospital on the one hand to become the natural and invaluable complement to the scientific department of pathology in the University, and on the other hand to place at the disposal of the hospital staff every resource of modern medical science. Further than this, the hope was expressed that with its new equipment the hospital might soon become the centre to which every medical practitioner in the district would find his way for guidance in modern methods of diagnosis, treatment, and research. If this ideal is realised to the full the Radcliffe Infirmary will have give an lead in one of the most important medical movements of recent times.

## STREET AMBULANCES FOR LONDON.

IN accordance with the request of the London County Council the Ambulance Committee of the Metropolitan Asylums Board have presented to the Board a scheme for the provision of street ambulances for the metropolis. The Ambulance Committee suggest that the scheme should be temporary and controlled by the Asylums Board, who could make use of the seven existing stations, supplementing them by 12 additional depôts, each furnished with an electrically driven ambulance. Two men, competent motor drivers and skilled in first aid, could be stationed at each depôt. The ordinary telephonic machinery would be relied upon for the calls, each station or depôt being connected with a head office, and the service would be night and day. The Ambulance Committee are to be heartily congratulated on the prompt production of a practical scheme to meet a crying want, and we are glad to know that their recommendations have been adopted by their authority. The development in London of telephones and the great facilities offered by motor traffic have been used by the Committee as a basis of their scheme to excellent effect. The capital cost of the scheme is estimated at £18,000, and the annual cost at £17,800, but the cost of the sites to be required for the new depôts is not included in these figures. It should be added that there will be absolutely no connexion between the accident service and the service in respect of infectious diseases. We hope that we shall soon see the scheme in actual work.

## RUPTURE OF THE SYMPHYSIS PUBIS IN LABOUR.

A CASE of this unusual complication of childbirth is reported in the *American Journal of Obstetrics* for November by Dr. H. E. Tuley. The recorded cases number something under 150, but the discussion which followed the presentation of the case to the American Association of Obstetricians and Gynæcologists at their twenty-sixth annual meeting makes it probable that only a small proportion of those actually diagnosed have been reported. Nearly 30 per cent. of the recorded cases have occurred quite spontaneously—that is, without forceps delivery or any similar adventitious violence. In one such case the child was actually born within an unruptured amniotic sac, showing that intrauterine pressure can scarcely have been excessive. But in the majority of cases excessive or misdirected forceps traction is the cause of this accident. The rupture is usually complete. It may take place in the median line, or at one side between the cartilage and the pubic bone. If the injury is slight the synovial cavity of the symphysis may not be injured. An excessive degree of the lesion is complicated by laceration of the vagina, the bladder, and the intervening connective tissue. Rupture of the symphysis is frequently accompanied by partial rupture of one or both of the sacro-iliac synchondroses. Sometimes the accident is recognised at once by feeling the bone give way or by an audible snap, or it may not be detected until the patient begins to sit up or get up, and finds herself disabled. Complications of the injury are common, such as rupture of the anterior vaginal wall, rupture of the bladder, severe hæmorrhage from rupture of veins, and suppuration of the joint or of the cellular tissues. Treatment consists of firm strapping and rest, with appropriate attention to any complications. Dr. Ill, in opening the discussion on Dr. Tuley's paper, thought he must have met ten such cases himself, and gave details of several of them. Of the two next speakers the first said that he knew of five cases which had never been reported, while the second had encountered four in his hospital experience. It seems clear that, at this rate, there must be hundreds, if not thousands, of unreported cases, and, quite possibly, there may be a good many minor degrees of this accident which are not recognised at all. It is the impression of several of the authorities who have reported instances of it that rickets and contracted pelvis predispose towards rupture of the symphysis pubis, mainly, no doubt, because they lead to dystocia and to forceps delivery, with prolonged or over-violent traction. A bibliography is appended to Dr. Tuley's paper.

## THE FREQUENCY OF AMENTIA AS RELATED TO SEX.

IN considering the sex-incidence of disease one may be led into mistakes by ignoring the importance of the economic factor. Many men are taken to our institutions because they are no longer fit to retain their place among their fellow-workers. With women the case is different. They are kept at home affectionately if ignorantly. A paper in the *Medical Record* of Oct. 25th, by Miss L. S. Hollingworth, appears to show that if the number of females in institutions for the feeble-minded is less than that of males, the explanation is that women are not mentally competitive to the same extent as men. She has made a study of the defective individuals who pass through the Clearing House for Mental Defectives in New York, and has found that in 1000 individuals there were 568 males and 432 females. Of those over 16 years of age there were 78 males and 159 females; of those over 30 years of age there were 9 males and 28 females. From 2 to 16 years of age there is a marked predominance of males, but after that age the females are greatly in excess. By the Binet scale the average age at examination is older for girls than for boys at all mental ages. Similarly the deviations from these averages are greater in all cases for girls than for boys. This shows that a boy will be brought to the Clearing House at an earlier age than is a girl of the same degree of defectiveness. Females survive in the social *milieu* beyond the age of 16 twice as frequently as boys, and thrice as frequently after the age of 30. Of ancillary interest is the number of children procreated by those feeble-minded individuals. In no case was there a history of procreation by the males, but 159 females over 16 years old had had 44 children, 31 of which were illegitimate. Of these 159 women 18 were married

or about to be married, and 17 were frankly immoral; and 56 were definitely known to have been victimised. Miss Hollingworth points out that so long as sex is a commercial asset to women they can survive without much regard to mental deficiency. The boy who cannot compete mentally becomes at an early age an object of concern, and is directed towards an institution.

## THE BATTLE OF THE CLUBS IN GERMANY.

THE Berlin Medical Society at a recent meeting discussed the battle of the clubs. The President, Professor Orth, said that according to the statutes of the society it might discuss not only scientific subjects, but also general professional matters. During the last few decades these questions had been practically abandoned and left to medical associations such as the local medical unions, the Leipziger Verband and others, but he believed that at the present critical time it was the duty of this leading medical society to declare that they fully agreed with the demands of the general practitioners and wished to support their brethren in their struggle. Professor Kraus, the director of the first medical clinic, speaking as a university professor, said that the free choice system was the only system under which medical men could work without being hindered by the interference of club officials. It was the duty of the clinical teachers not to abandon their former pupils in their endeavours to maintain their rights. Dr. Munter then explained that although the clubs had declared their inability to pay higher fees owing to their financial situation they had nevertheless money enough to appoint "strike-breakers" at enormous cost. After this short but impressive discussion a motion was unanimously adopted to the effect that the Berlin Medical Society was of opinion that by recent legislation the medical profession was seriously threatened in its liberty and independence, which were absolutely necessary not only for scientific work but also for the treatment of patients, and that the society wished to declare that it would be on the side of the profession against the clubs.

Mr. George Wills and Mr. Henry Wills have added to their promise of £150,000 for new buildings for the University of Bristol an offer of a further sum, not to exceed £25,000, to pay for an immediate extension of the University site, and also to provide an extra endowment of £5000 for upkeep.

KING EDWARD VII. MEMORIAL, BIRMINGHAM.—The scheme to commemorate the late Sovereign has been exceedingly successful. The statue in Victoria-square was unveiled last April, and the fund accounts now closed record the transference of a sum of nearly £30,000 to the governors of the Children's Hospital towards the building fund of the new institution. This sum is much in advance of the anticipations at the time the scheme was launched, and it secures the success of the hospital committee's plans. There is now every prospect that the hospital may be opened free of debt. Considerable progress has been made in the erection of the new buildings, which are now up to the first floor level, and it is hoped that the opening ceremony will take place in the summer of 1915. The total cost of the erection and equipment was estimated at £64,000. Towards that amount £55,000 have been received or promised. At present the out-patient department is separate from the hospital and situated in Steelhouse-lane. This is not abreast of modern requirements, and the department may have to be transferred to the new hospital when the whole of the work will be carried on upon the one site.

# MARTIAL AND MEDICINE.[1]

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IN this short study I propose not to stray beyond the strict limits that its title imposes, and so far as possible to allow Martial to speak for himself in the broken English into which I have had the presumption to endeavour to render his epigrams. I do claim the merit of having adhered with some fidelity to the language of the originals, but beyond this I do not expect even the small measure of appreciation that Martial claims for himself:

> Sunt bona, sunt quaedam mediocria, sunt mala plura
> quae legis hic: aliter non fit, Avite, liber.
>
> Some good, some middling, many bad
> you'll find in this edition:
> Avitus, books can not be made
> except on this condition.

### *The Low Status of Medicine in Rome in Martial's Time.*

Martial's epigrams, as a whole, mirror the every-day life of Imperial Rome in the latter part of the first century of the Christian era; the allusions to medicine are not numerous, but such as they are they do afford just those living touches that reanimate the dry bones of medical history, but which are so apt to elude the historian. A profession of medicine can hardly be said to have existed at the time in Rome, though, as the epigrams show, the practitioners were all too numerous. Though Julius Cæsar had done something to raise the status of medicine by granting civic rights to medical immigrants, and though Augustus and the later emperors had beamed benevolently on their own body-physicians, the calling of medicine was still too ignoble for adoption by the Roman of culture and breeding, despite the wealth of a few leading physicians, and was almost exclusively in the hands of foreigners, mostly Greek, or of the less desirable members of the native populace. Men such as these, by their ignorance, their cupidity, their viciousness, their blatant quackery, afford a fair target for the shafts of Martial's satire. It was all 'go as you please': no compulsory curriculum, no diploma, no censors board, no General Medical Council, no barrier of healthy public sentiment to restrain professional obliquity. The great Asclepiades had long since shown that ignorance and effrontery were effective passports to the highest medical eminence. Failing at the Bar, he conceived the idea of exploiting the practice of medicine. Ignorant of the rudiments of medicine, he wisely decided to substitute for the approved stock-in-trade of the *soi-disant* physician those simple methods with which every layman has some acquaintance—physical exercise, bathing, diet, and the judicious selection and liberal administration of the choicest vintages. There was a strong dash of Larkinism about Asclepiades: 'to hell with the Pharmacopœia' was his attitude towards medical practice. One wonders that such a man should have failed at the common law Bar, but being what he was it was inevitable that the practice of medicine should offer superior attractions and greater scope for his activity.

Though, as I have said, there was no compulsory curriculum, some sort of clinical teaching seems to

[1] A lecture delivered before the History of Medicine Section of the Royal Society of Medicine on Dec. 3rd, 1913.

have been attempted, but, if it was of advantage to the student, according to Martial it brought little comfort to the patient—

Languebam: sed tu comitatus protinus ad me
venisti centum, Symmache, discipulis.
Centum me tetigere manus aquilone gelatae,
non habui febrem, Symmache, nunc habeo.

I lay ill: but soon Symmachus sought me
with a class of a hundred young men,
whose hundred cold paws have brought me
the fever I lacked till then.

*The Bane of Pretentious Specialism.*

Specialism may be the measure of the excellence of medicine at any period, but it may be also the reverse. In Martial's time it was assuredly the measure of the degradation of the healing art: here is an enumeration of some of those who preyed on the vitals of Imperial Rome:—

Totis, Galle, iubes tibi me servire diebus
et per Aventinum ter quater ire tuum.
Eximit aut reficit dentem Cascellius aegrum,
infestos oculis uris, Hygine, pilos:
Non secat et tollit stillantem Fannius uvam,
tristia servorum stigmata delet Eros.
Enterocelarum fertur Podalirius Hermes:
qui sanet ruptos dic mihi, Galle, quis est.

Gallus, I'm at your service all the day
trudging the Aventine three times each way:
Cascellius draws bad teeth or does repairs,
Hyginus burns from eyelids worrying hairs.
A knifeless Fannius docks lax uvulas,
Eros removes from slaves degrading scars:
Hermes, like Podalirius, ruptures cures:
Who, Gallus, heals an injury like ours?

That 'ruptos' should not be rendered 'ruptured,' as most translators have done, is clearly shown by the context of the previous line, and there is little doubt that Martial indicates a condition arising from the malpractices which were prevalent at the time in Rome, and which figure *ad nauseam* in his epigrams. The word 'tollit,' with its varying shades of meaning, leaves some doubt as to the exact nature of the treatment which Fannius meted out to relaxed uvulas, but it suggests that then, as now, man was impatient to discard his superfluities. The uvula has always presented the same irresistible temptation to the budding laryngologist as the appendix to the young surgeon, and other savages, as you know, inflict similar mutilations on their own ears and noses. Can it be that Fannius employed the cautery, which Hyginus used in the treatment of entropion, or is the allusion to some escharotic, or to an écraseur? On the other hand, the word may simply indicate the use of some astringent which raises up the trailing uvula, and this view is supported by the fact that Celsus recommends local astringent applications, in preference to the knife, in any case of acute congestion, such as might induce copious hæmorrhage.

Here, then, are mentioned dentists, oculists, laryngologists, dermatologists, and hernia specialists, of some of whom we shall have something to say hereafter. Martial is not alone in denouncing the bane of the pretentious specialism prevalent in his time, as we find Scribonius Largus, physician to the Emperor Claudius, inveighing against those who undertake the case of isolated diseases, whereas the true physician should be able to cure all.

Many epigrams deride the competence or the character of these manifold practitioners. Here are typical examples:—

Clinicus Herodes trullam subduxerat aegro:
deprensus dixit: 'Stulte, quid ergo bibis?'

Doctor Herodes filched a bowl
from a sick patient's table:
when caught, he merely said 'You fool,
to drink you are not able.'

And this pair, and many others in similar strain:

Chirurgus fuerat, nunc est vispillo Diaulus,
coepit quo poterat clinicus esse modo.

Diaulus undertook of late
the operator's art:
but now prefers to operate
the undertaker's part.

Nuper erat medicus, nunc est vispillo Diaulus,
quod vispillo facit, fecerat et medicus.

Diaulus held till recently
the office of physician,
but now in strict conformity
a gravedigger's commission.

The distinction between the clinical physician and the operating surgeon is thus clearly recognised. The term 'medicus' is of much wider application than 'clinicus,' and the nearest English equivalent is to be found in the title 'apothecary'; he might be a mere druggist, or he might actually practise medicine, but his status was, speaking generally, inferior to that of the 'clinicus.'

*Oculists.*

Oculists come in for a full measure of Martial's satire; like Diaulus, they were prone to descend in the social scale:

Oplomachus nunc es, fueras ophthalmicus ante:
fecisti medicus quod facis oplomachus.

Though once an oculist, you now replace
your lancet by the gladiator's lance:
the change of weapon makes no difference,
you still administer the coup de grâce.

For lack of English equivalents it is impossible to reproduce the play on the words 'oplomachus' and 'ophthalmicus,' so I have endeavoured in my translation to transfer it to the instruments of their respective callings. Here is a skit on the oculist's skill:

Solvere dodrantem nuper tibi, Quinte, volebat
lippus Hylas, luscus vult dare dimidium.
Accipe quam primum: brevis est occasio lucri:
si fuerit caecus, nil tibi solvet Hylas.

Blear-eyed Hylas yesterday
to pay your fee was willing:
now one eye is gone he may
halve the previous shilling.

Quintus, take it greedily,
profit by the occasion:
when he's blind, he'll certainly
try complete evasion.

In contrast to this it is pleasant to encounter an oculist who was prompt to denounce the injurious habits of his patient: we may label the epigram 'Albuminuric Retinitis.'

Potor nobilis, Aule, lumine uno
luscus Phryx erat alteroque lippus.
huic Heras medicus 'Bibas caveto:
vinum si biberis, nihil videbis.'
Ridens Phryx oculo 'Valebis' inquit.
misceri sibi protinus deunces
sed crebro iubet. Exitum requiris?
Vinum Phryx, oculus bibit venenum.

Aulus, there's Phryx that fine old winebibber,
blind of one eye and of the other blear:
his doctor Heras said, 'Drop alcohol
for if you take it, you'll not see at all.'
Laughing Phryx wished his eyes a last 'Good-bye'
and ordered cups to be mixed frequently:
d'you want to know the consequences? why,
'twas wine to Phryx, but poison to his eye.

We learn from Martial that artificial eyes were beyond the ophthalmic science of his day:

> Dentibus atque comis—nec te pudet—uteris emptis,
> quid facies oculo, Laelia? non emitur.
>
> False teeth and hair flaunts Laelia shamelessly,
> but not false eyes, for these she cannot buy.

Doubtless the repelling spectacle of the empty orbit, at a time when diseases of the eye flourished unrestrained by the simplest antiseptic remedies, must have been only too common in Rome. And worse than this, where now we employ sedatives, the practice then was to use irritants and strong astringents—

> Aspicis hunc uno contentum lumine, cuius
> lippa sub adtrita fronte lacuna patet.
>
> You see that fellow yonder, how
> he swaggers with a single eye:
> while underneath his shameless brow
> there gapes a sightless cavity.

### *Dentists and Dentistry.*

Dentists and dentistry figure prominently in Martial's epigrams. Apparently domestic remedies for aching teeth and for other simple dental disorders fell within the province of the general medical practitioner. Celsus, who, though not himself a medical man, compiled the leading medical text-book of the time, devotes a good deal of space to the teeth. He has a legion of medicinal remedies for the relief of toothache, most of which are to be applied directly to the aching tooth. Similar applications are recommended for the aching of carious teeth, but he lays down no lines of treatment for dental caries, if unattended by pain. Extraction is his resource, when topical applications fail to relieve the pain. He advocates making teeth that have become loose fast, by means of gold wires binding them to those that are firm, but the real conservative dentistry was left in the hands of dental charlatans. Pliny[1] speaks of these men cauterising carious teeth with ignited walnut shells. Scribonius Largus[2] does mention scraping away the carious matter of a decayed tooth as though it were an orthodox medical procedure, but Andromachus, whom Nero raised from being his own body-physician to that of archiater, or physician-in-chief, had no better remedy for caries than packing the cavity with the theriaca, or treacle, which he invented as a general panacea, and which maintained its ancient reputation right down to modern times. If this was the treatment to which Andromachus subjected his imperial master, it affords perhaps some explanation, if not an excuse, for those wild outbursts of passion that darkened the life of Nero. Dentists indeed seem to have been more successful in stopping the tooth than the ache, for Pliny[3] cites, in most matter-of-fact language, the case of a man who threw himself from the top of a house after having a hollow tooth stopped with laser and wax: and he adds, by way of comment: "It is a well-known fact that, if this is rubbed on the muzzle of a bull, it irritates him to an extraordinary degree." A visit to the dentist in those days was not a thing to be lightly undertaken, for according to Pliny again "it is beneficial to introduce into hollow teeth the ashes of the dung of mice, or of the dried liver of lizards." Celsus makes no mention of artificial teeth, and to judge from the various allusions by Martial, it would seem that they were worn rather to improve the appearance than to aid mastication.

> Thais habet nigros, niveos Laecania dentes;
> quae ratio est? Emptos haec habet, illa suos.
>
> Laecania has white teeth, Thais brown;
> How comes it? One has false teeth, one her own.

Other epigrams describe the composition of these false teeth:

> Nostris versibus esse te poetam
> Fidentine, putas cupisque credi?
> sic dentata sibi videtur Aegle
> emptis ossibus Indicoque cornu.
>
> You, Fidentinus, court a poet's crown
> by passing off my verses as your own:
> so Aegle counterfeits reality
> with teeth of bone and Indian ivory.

And again—

> et tres sunt tibi, Maximina, dentes,
> sed plane picеique buxeique.
>
> Three teeth has Maximina, all of which
> are plainly boxwood, and as black as pitch.

Archæologists have shown, by recovered specimens, that these artificial teeth of ivory, bone, or boxwood, were generally fixed by wiring them to adjacent firm teeth. Guerini suggests that the Romans learnt this procedure from their Etruscan neighbours, and not from Greek immigrants. Mention of gold for binding the teeth together is found in the Law of the Twelve Tables, composed by the Decemviri at Rome in 450 B.C., whereas the influx of Greek physicians into Rome did not commence till near the end of the third century B.C. Moreover, many examples of this gold work have been found among Etruscan remains. But there is at least a suggestion in Martial that something of the nature of artificial dentures was also worn, for he says:

> Nec aliter dentes quam serica nocte reponas.

Teeth that could be laid aside at bedtime as readily as the clothing cannot have been fixed with wires, and must almost necessarily have been worn on some form of movable denture. Guerini claims to have identified one of the period, but his exposition does not seem to me very convincing.

### *The Care of the Teeth.*

The care of the teeth is another fertile subject for Martial's wit. Tooth-picks and dentifrices assume a special prominence. The favourite material for tooth-picks was lentisc wood, which was believed incidentally to exert a favourable pharmacological action. Galen, for example, recommends holding in the mouth warm oil of lentisc to relieve pain due to disease of the gums.

> Lentiscum melius: sed si tibi frondea cuspis
> defuerit, dentes pinna levare potest.
>
> From lentisc sticks the best tooth-picks
> are made, but should they fail,
> a feather's quill as surely will
> to ease thy teeth avail.

Pliny is more explicit on the subject of quill tooth-picks: he says that picking the teeth with the quill of a vulture turns the breath sour, while a porcupine's quill makes them firm. A passage of Petronius, in which he describes a tooth-pick as 'spina argentea,' shows that they were sometimes made of silver, and Roman tooth-picks of gold, of pre-Christian times, have also been unearthed. A tooth-pick and an ear-pick, to which latter Martial

[1] Natural History, xxiii., 77.
[2] De Compositione Medicamentorum, x.
[3] Natural History, xxii., 49.

alludes in the following epigram, have also been discovered combined in a single instrument:

Si tibi morosa prurigine verminat auris,
arma damus tantis apta libidinibus.

If thine ear chance to trouble thee
with creeping irritation,
an instrument we guarantee
to stop such titillation.

Ear-picks had either a spatulate end or a flat head, like a small coin, set at right angles on the end of a shaft.

Roman non-medical writers make constant mention of dentifrices, showing how greatly the Romans esteemed the appearance of the teeth. Pliny recommends cleaning blackened teeth by rubbing them with burnt nitre. Even the medical writers extol the dentifrice. Celsus says that stains of the teeth should first be scraped and then rubbed with a dentifrice. Scribonius Largus, who describes many dentifrices, seems to regard them, as Martial does, as intended to preserve the beauty rather than the health of the teeth. From him we learn that calcined stag's horn was one of the ingredients of the tooth-powder used by Messalina, the wife of the Emperor Claudius, so that the calcareous constituents of modern tooth-powders have an ancient pedigree. Galen, in the following century, recommends special medicaments and dentifrices for restoring the whiteness of the teeth, and recognises much more than Celsus and Scribonius Largus, that they are also useful to keep the teeth free from disease. To Martial, however, the dentifrice is an item of the repertoire of the beauty specialist. In this epigram the dentifrice addresses some aged hag:

Quid mecum est tibi? me puella sumat:
emptos non soleo polire dentes.

I'm not for thee: on use of me
only a maiden ventures:
I have no wish to give polish
to artificial dentures.

### *Massage, Drugs, &c.*

Massage flourished in Rome, and then as now proved attractive for other than its legitimate uses. It was practised both by men and women, but the masseuse chiefly seems to have made a fine art of its abuse—*corruptio optimi pessima*. Seneca says that he would rather thrust his hand into the fire than submit it to the manipulations of a rubber of either sex. One epigram alludes to massage as an accessory of the luxuries of the table:

Stat exoletus suggeritque ructanti
pinnas rubentes cuspidesque lentisci
et aestuanti tenue ventilat frigus
supina prasino concubina flabello.
* * * * *
percurrit agili corpus arte tractatrix
manumque doctam spargit omnibus membris.

Tooth-picks in hand a minion stands and gives
red feathers, when his master's stomach heaves:
when hot, beside him lies a courtesan
to waft fresh coolness from a leek-green fan.
A masseuse nimbly o'er his body skims
and makes deft passes over all his limbs.

The red feathers of the flamingo were used to excite vomiting.

Now and again Martial gives us a peep into the armamentarium of the practising physician. He shows us his ivory medicine-chest:

Artis ebur medicae narthecia cernis: habebis
munera quae cuperet Paccius esse sua.

Here's a medicine-chest you see
all made out of ivory:
in this present you'll acquire
all that Paccius could desire.

He names also some of the drugs in common use; here are some remedies for constipation:

Utere lactucis et mollibus utere malvis:
nam faciem durum, Phoebe, cacantis habes.

Use mallows and use lettuces
that soften defaecation:
for you present the facies
of chronic constipation.

Lettuces enjoyed a great vogue in Roman medicine. Antonius Musa was said to have saved the life of the Emperor Augustus by a diet of lettuces, and received in return a huge fee, a gold ring, and a public statue adjacent to that of Æsculapius.

Here is an anticipation of Carlsbad plums:

Pruna peregrinae carie rugosa senectae
sume: solent duri solvere ventris onus.

Try prunes, they're sold wrinkled and old,
brought from some foreign nation:
they'll be of use in setting loose
thy belly's constipation.

Next we have some lines addressed to a girdle, which remind us of their former uses in obstetric practice:

Longa satis nunc sum: dulci sed pondere venter
si tumeat, fiam tunc tibi zona brevis.

Now I'm long enough, but when
with delicious tension
burdened is thy belly, then
I shall need extension.

### *An Epitaph on a Child.*

It should be borne in mind that Martial possessed no medical knowledge, and correspondingly we find in his epigrams no living pictures of disease, but these tender lines on the death of little Canace seem to suggest that the child died of cancrum oris:

Aeolidos Canace tacet hoc tumulata sepulchro
ultima cui parvae septima venit hiems.
ah scelus, ah facinus! properas qui flere, viator,
non licet hic vitae de brevitate queri:
tristius est leto leti genus: horrrida vultus
apstulit et tenero sedit in ore lues,
ipsaque crudeles ederunt oscula morbi
nec data sunt nigris tota labella rogis.
Si tam praecipiti fuerant ventura volatu
debuerant alia fata venire via.
Sed mors vocis iter properavit eludere blandae,
ne posset duras flectere lingua deas.

Here lieth Aeolis' daughter Canace,
Her seventh winter was her last: ah me!
Ah cruel shame! haste by, and shed no tears,
Traveller, lamenting her brief span of years.
Sadder than death death's fashion: a foul growth
Made ravenous session on her tender mouth,
Consuming it, and left no lips entire
To lavish kisses on the funeral fire.
If fate must needs swoop down in headlong flight,
It should have come to her in gentler plight.
Death sped to close her gentle voice's gate,
So that it might not bend relentless fate.

In this epitaph Martial is seen at his best: the language and the sentiment are chaste and tender, and stand out in arresting contrast to the gross obscenity of so many of his epigrams. It is not the only epigram in which he shows his real love of children, a characteristic which perhaps he brought with him from Spain, where the fondness lavished on children is surpassed only by the cruelty inflicted on animals. Martial's foulness is no basic feature of his mind. He desired above all things to be popular, and to this end he supplied

his readers with the sort of garbage they desired, but at the same time has made atonement to posterity in the exceeding fitness of his diction and the grace and variety of his metres.

*Malingering.*

In several epigrams Martial holds up the malingerer to ridicule. Disease is only too apt to be simulated for the sympathy it excites and the service it exacts, and in Rome there was the additional incentive of congratulatory presents on recovery, to increase its prevalence.

Aegrotas uno decies aut saepius anno,
nec tibi sed nobis hoc, Polycharme, nocet:
nam quotiens surgis, soteria poscis amicos,
sit pudor: aegrota iam, Polycharme, semel.

You're sick ten times or oftener every year,
though yours the sickness we the suffering bear:
at each recovery for gifts you call,
Fie! Polycharmus: sicken once for all.

Another feigns infirmity for his stomach's sake:

Leniat ut fauces medicus, quas aspera vexat
adsidue tussis, Parthenopaee, tibi,
mella dari nucleosque iubet dulcesque placentas
et quicquid pueros non sinit esse truces.
At tu non cessas totis tussire diebus.
Non est haec tussis, Parthenopaee, gula est.

To soothe Parthenopaeus' cough, which serves to make
his throat the seat of chronic irritation,
his doctor orders honey, kernels, and sweet cake,
and all that weans small children from temptation:
it's not to ease his throat, but for his stomach's sake.
Parthenopaeus coughs without cessation.

Another simulates gout in his own person, just as a later generation invokes the legitmate uncertainty of a wife's health under the inexorable pressure of social necessity.

Discursus varios vagumque mane
et fastus et have potentiorum
cum perferre patique iam negaret
coepit fingere Caelius podagram,
quam dum volt nimis adprobare veram
et sanas linit obligatque plantas
inceditque gradu laborioso—
quantum cura potest et ars doloris!
desit fingere Caelius podagram.

When Caelius could no longer tolerate
the pompous salutations of the great,
and morning calls and runnings in and out
he came perforce to counterfeiting gout.
While he exhibits such excess of zeal
to prove his artificial suffering real,
with bandages and ointments plastered thick
on healthy feet, supported by a stick—
(how trickery and brooding magnify
our ailments!)—: Caelius ceased to act a lie.

Another man is well enough to plead, but not to pay:

Litigat et podagra Diodorus, Flacce, laborat:
sed nil patrono porrigit: haec cheragra est.

Diodorus, while he sues in court,
on gouty feet can stand:
but when his lawyer's bill is brought,
the gout sets fast his hand.

*Gout and other Subjects.*

Gout seems to have been exceedingly common in Rome, if we may judge from the frequency of its mention in Martial. On this point we have the evidence of his elder contemporary Pliny, who says, "Gout used to be an extremely rare disease, not in the times of our fathers and grandfathers only, but even within my own memory." No doubt the increased frequency was referable to the excessive indulgence in rich foods and in wine in place of the frugal simplicity of earlier years. In one of his epigrams Martial seems to hint at the importance of purin bodies as a precursor of gout, and recognises its association with hepatic inadequacy:

Mullorum leporumque et suminis exitus hic est,
sulphureusque color carnificesque pedes.

Of hares, and mullet, and sow's teat,
what's the termination?—
bilious colour and the feet
racked with inflammation.

Another epigram touches the fringe of very recent pathology, for Martial explains the phenomena of acquired tolerance, which according to ancient tradition was conspicuously displayed in the person of Mithridates, King of Pontus:

Profecit poto Mithridates saepe veneno
toxica ne possent saeva nocere sibi:
tu quoque cavisti cenando tam male semper
ne posses umquam, Cinna, perire fame.

By poisonous doses of increasing strength
the king of Pontus gained immunity:
so Cinna by low feeding can at length
confront starvation with impunity.

Pliny says that, after the defeat of Mithridates, Pompey found in his private cabinet the recipe for his antidote in his own handwriting: 'Take two dried walnuts, two figs, and twenty leaves of rue: pound them all together with the addition of a grain of salt: if a person takes this mixture fasting, he will be proof against all poisons for that day.' Galen[4] says that Marcus Aurelius used the prescription regularly.

Martial vies with Herrick in the number of epigrams he devotes to the unsavoury subject of bad breath. Here is a sample:—

Quod nullum calicem tuum propinas
humane facis, Horme, non superbe.

That Hormus does not pass the wine
he's tasted to the company
is not of arrogance a sign,
but only mere humanity.

In these Martial fails, with Herrick, to rise above his subject, but Herrick for once has contrived to impart to his 'Jone and Jane' a degree of daintiness worthy of a better theme.

*Alcoholism.*

In several epigrams Martial jibes at the futile efforts of the alcoholic to disguise the odour of the breath by means of perfumes, and incidentally he depicts the alcoholic facies in the one that follows. It contains also a covert allusion to those poetasters who seek inspiration by eating bay leaves, and to bring out this *double entente* I have translated 'bibit' as 'chews.'

Fetere multo Myrtale solet vino,
sed fallat ut nos, folia devorat lauri
merumque cantâ fronde, non aquâ, miscet.
Hanc tu rubentem prominentibus venis
quotiens venire, Paule, videris contra,
dicas licebit, 'Myrtale bibit laurum.'

Though redolent of wine she yet deceives
our nostrils with the odour of bay leaves,
'tis these, not water, that her wine receives.
As often as you see her, all ablaze
with starting venules on her flaming face,
approaching you, say 'Myrtale chews bays.'

Rome was familiar also, as we are, with that other type of alcoholic facies that suggests the appearance of a water-logged suet pudding. Pliny describes it: "From wine comes that pallid hue, those drooping eyelids, those sore eyes, those tremulous hands, unable to hold with steadiness the overflowing vessel," and so on.

And here we must part company with Martial.

[4] De Antidotis I, 1.

# ROYAL COMMISSION ON VENEREAL DISEASES.

AT the meeting of the Royal Commission held on Nov. 24th, evidence was given by Dr. J. C. Dunlop, superintendent of the Statistical Department in the office of the Registrar-General for Scotland.

Dr. Dunlop gave figures to show that syphilis and parasyphilitic diseases do not hold a very important place in the list of the principal causes of death in Scotland. The figures for 1911 showed that the number of deaths due to all tuberculous diseases was 8887, to phthisis 5451, cancer 4948, accident 2624, whooping-cough 2347, measles 923, syphilis and parasyphilitic diseases 552 (or including aneurysm 713), scarlet fever 541, diabetes 445, rheumatism, 469, appendicitis 410, enteric fever 272, suicide 253.

It was Dr. Dunlop's impression from consideration of the figures from 1880 onwards that there was a decrease in venereal diseases in Scotland. He agreed that the figures available with regard to deaths from these diseases were, on account of defects in certification and diagnosis, only to be accepted with reservations, and that the true amount of deaths from these causes is almost certainly considerably greater than that shown by registration; but looking to the facts that diagnosis and certification are improving, he considered that the decline which the figures showed in the number of deaths pointed to a genuine decrease in syphilis.

Dealing with the question of confidential certification of deaths, he was aware that there was a body of opinion in its favour, but he thought that from the point of view of the Registrar-General there might be practical difficulties about adopting it.

A scheme under which a general certificate of death would be sent to the local registrar and a confidential certificate, giving details of the cause of death, to the central office in Edinburgh involved a risk that the latter would not receive a certificate in every case, and consequently endangered the completeness of the register.

# VITAL STATISTICS.

## HEALTH OF ENGLISH TOWNS.

IN the 96 English and Welsh towns with populations exceeding 50,000 persons at the last Census, and whose aggregate population at the middle of this year is estimated at 17,852,766 persons, 8491 births and 4839 deaths were registered during the week ended Saturday, Nov. 29th. The annual rate of mortality in these towns, which had been 13·3, 13·8, and 13·4 per 1000 in the three preceding weeks, increased to 14·1 per 1000 in the week under notice. During the first nine weeks of the current quarter the mean annual death-rate in these towns averaged 13·7, against 13·6 per 1000 in London during the same period. Among the several towns the death-rate last week ranged from 6·0 in Bath, 6·8 in Oxford, 7·4 in Southend-on-Sea, 7·5 in York, and 7·6 in Eastbourne, to 19·6 in Swansea, 19·8 in South Shields and in Aberdare, 20·2 in Bootle and in Blackburn, 20·3 in Bury, and 20·8 in Middlesbrough.

The 4839 deaths from all causes were 245 in excess of the number in the previous week, and included 348 which were referred to the principal epidemic diseases, against numbers steadily declining from 925 to 361 in the seven preceding weeks. Of these 348 deaths, 152 resulted from infantile diarrhœal diseases, 65 from diphtheria, 39 from measles, 39 from whooping-cough, 35 from scarlet fever, and 18 from enteric fever, but not one from small-pox. The mean annual death-rate from these diseases last week was equal to 1·0, against 1·1 per 1000 in each of the two preceding weeks. The deaths of infants (under 2 years of age) attributed to diarrhœa and enteritis, which had steadily decreased from 769 to 149 in the seven preceding weeks, slightly rose to 152 last week; of this number 46 were recorded in London, 11 in Birmingham, 9 in Liverpool, 6 in Manchester, and 4 each in Sheffield, Sunderland, and Rhondda. The deaths referred to diphtheria, which had been 46, 63, and 76 in the three preceding weeks, declined to 65 last week, and included 11 in Birmingham, 9 in London, 4 in Manchester, 3 in Stoke-on-Trent, and 3 in Bradford. The fatal cases of measles, which had been 30, 43, and 50 in the three preceding weeks, fell to 39 last week; 10 deaths occurred in Sheffield, 6 in Norwich, and 3 each in London, Stoke-on-Trent, and Leicester. The deaths attributed to whooping-cough, which had been 46, 35, and 33 in the three preceding weeks, rose to 39 last week, and included 5 in London, 5 in Birmingham, 4 in Liverpool, 3 in Wallasey, 2 in West Ham, and 2 in Oldham. The deaths referred to scarlet fever, which had been 34, 35, and 32 in the three preceding weeks, rose to 35 last week, of which number 5 were recorded in London, 4 in Manchester, and 3 in Sheffield. The fatal cases of enteric fever, which had been 18, 16, and 21 in the three preceding weeks, fell to 18 last week, and included 2 in Sheffield and 2 in Hull.

The number of scarlet fever patients under treatment in the Metropolitan Asylums and the London Fever Hospitals, which had steadily risen from 2112 to 3980 in the 12 preceding weeks, had further increased to 4112 on Saturday last; 618 new cases were admitted during the week, against 619, 597, and 558 in the three preceding weeks. These hospitals also contained on Saturday last 1200 cases of diphtheria, 164 of whooping-cough, 73 of enteric fever, and 57 of measles, but not one of small-pox. The 1224 deaths from all causes in London were 55 in excess of the number in the previous week, and were equal to an annual death-rate of 14·1 per 1000. The deaths referred to diseases of the respiratory system, which had been 205, 206, and 214 in the three preceding weeks, further rose to 261 last week, but were 25 less than the number recorded in the corresponding week of last year.

Of the 4839 deaths from all causes in the 96 towns, 186 were attributed to different forms of violence, and 403 were the subject of coroners' inquests. The causes of 36, or 0·7 per cent., of the total deaths were not certified either by a registered medical practitioner or by a coroner after inquest. All the causes of death were duly certified in London and in its 14 suburban districts, in Sheffield, Leeds, Bristol, Bradford, Newcastle, Nottingham, and in 53 other smaller towns. Of the 36 uncertified causes of death, 6 were recorded in Liverpool, 5 in Birmingham, 3 in Burnley, 3 in Blackburn, and 2 in Dudley.

## HEALTH OF SCOTCH TOWNS.

In the 16 largest Scotch towns with an aggregate population estimated at 2,259,600 persons at the middle of this year, 1022 births and 737 deaths were registered during the week ended Saturday, Nov. 29th. The annual rate of mortality in these towns, which had been 14·0, 16·2, and 15·8 per 1000 in the three preceding weeks, rose to 17·0 per 1000 in the week under notice. During the first nine weeks of the current quarter the mean annual death-rate in these towns averaged 15·0, against a corresponding rate of 13·7 per 1000 in the 96 large English towns. Among the several Scotch towns the death-rate last week ranged from 6·8 in Hamilton, 8·5 in Clydebank, and 10·4 in Perth, to 19·5 in Leith, 22·2 in Kirkcaldy, and 24·1 in Coatbridge.

The 737 deaths from all causes were 52 in excess of the number in the previous week, and included 75 which were referred to the principal epidemic diseases, against 84 and 68 in the two preceding weeks. Of these 75 deaths, 35 resulted from measles, 14 from diphtheria, 11 from scarlet fever, 8 from infantile diarrhœal diseases, and 7 from whooping-cough, but not one from enteric fever or from small-pox. These 75 deaths from the principal epidemic diseases were equal to an annual death-rate of 1·7, against 1·0 per 1000 in the 96 large English towns. The deaths attributed to measles, which had been 11, 36, and 33 in the three preceding weeks, rose to 35 last week; of this number 24 were registered in Glasgow, 3 in Edinburgh, 2 in Paisley, and 2 in Kirkcaldy. The deaths referred to diphtheria, which had been 11, 10, and 10 in the three preceding weeks, rose to 14 last week, and included 6 in Glasgow and 3 in Aberdeen. The fatal cases of scarlet fever, which had declined from 14 to 6 in the four preceding weeks, rose to 11 last week, and comprised 10 in Glasgow and 1 in Greenock. The deaths of infants (under 2 years) attributed to diarrhœa and enteritis, which had been 19, 21, and 14 in the three preceding weeks, further declined to 8 last week, of which 3 deaths were recorded in Dundee and 2 in Glasgow. The 7 deaths referred to whooping-cough were double the average in the earlier weeks of the quarter, and comprised 4 in Glasgow, 2 in Coatbridge, and 1 in Edinburgh.

The deaths referred to diseases of the respiratory system, which had been 84, 97, and 119 in the three preceding weeks, further rose to 129 in the week under notice; 26 deaths were attributed to different forms of violence, against 24 and 30 in the two preceding weeks.

## HEALTH OF IRISH TOWNS.

In the 27 town districts of Ireland with an aggregate population estimated at 1,199,180 persons at the middle of this year, 598 births and 382 deaths were registered during the week ended Saturday, Nov. 29th. The annual rate of mortality in these towns, which had been 17·6, 18·8, and 16·4 per 1000 in the three preceding weeks, rose to 16·6 per 1000 in the week under notice. During the first nine weeks of the current quarter the mean annual death-rate in these Irish towns averaged 17·3 per 1000; in the 96 large English

towns the corresponding rate did not exceed 13·7, while in the 16 Scotch towns it was equal to 15·0 per 1000. The annual death-rate last week was equal to 19·7 in Dublin (against 14·1 in London and 18·9 in Glasgow), 14·7 in Belfast, 18·4 in Cork, 14·0 in Londonderry, 17·6 in Limerick, and 11·4 in Waterford, while in the 21 remaining smaller towns the mean death-rate did not exceed 14·7 per 1000.

The 382 deaths from all causes were 4 in excess of the number in the previous week, and included 30 which were referred to the principal epidemic diseases, against 41 and 38 in the two preceding weeks. Of these 30 deaths, 12 resulted from infantile diarrhœal diseases, 5 from measles, 5 from scarlet fever, 4 from diphtheria, 3 from enteric fever, and 1 from whooping-cough, but not one from small-pox. The mean annual death-rate from these diseases last week was equal to 1·3 per 1000; in the 96 large English towns the corresponding rate did not exceed 1·0, while in the 16 Scotch towns it reached 1·7 per 1000. The deaths of infants (under 2 years) attributed to diarrhœa and enteritis, which had been 16, 15, and 18 in the three preceding weeks, declined to 12 last week, of which 7 were registered in Dublin and 2 in Cork. The deaths referred to scarlet fever, which had been 8, 7, and 12 in the three preceding weeks, fell to 5 last week, 4 of which occurred in Belfast. The 5 fatal cases of measles, including 3 in Belfast, were slightly in excess of the average in the earlier weeks of the quarter. Of the 4 deaths attributed to diphtheria, 2 occurred in Dublin, 1 in Belfast, and 1 in Sligo. Of the 3 deaths from enteric fever 2 were registered in Belfast and 1 in Coleraine; the fatal case of whooping-cough occurred in Waterford. In addition to the above deaths a fatal case of typhus was registered in Dublin.

The deaths referred to diseases of the respiratory system, which had been 69, 73, and 68 in the three preceding weeks, rose to 76 in the week under notice. Of the 382 deaths from all causes, 123, or 32 per cent., occurred in public institutions, and 7 resulted from various forms of violence. The causes of 11, or 2·9 per cent., of the total deaths were not certified either by a registered medical practitioner or by a coroner after inquest; in the 96 large English towns the proportion of uncertified causes did not exceed 0·7 per cent.

# THE SERVICES.

## THE SHORTAGE IN THE MEDICAL BRANCH OF THE ROYAL NAVY.

THE Lords Commissioners of the Admiralty have adopted the following recommendations of the Medical Consultative Board which were made with the object of remedying to some extent the shortage in the Medical Branch of the Royal Navy:—

1. The disciplinary control (as far as minor punishments are concerned) of the sick berth staff has been delegated to the senior medical officers of the three large hospitals at Haslar, Plymouth, and Chatham.

2. The senior medical officer will in future preside at medical surveys.

3. Control of publication of papers on professional subjects is vested in the Medical Director-General.

4. Their Lordships approve of naval medical officers being allowed to engage in private practice and receive fees in the same manner as officers of the Royal Army Medical Corps, so far as compatible with their official duties.

5. Their Lordships approve in principle the proposal to institute a journal for the Naval Medical Service on the lines of the *Journal of the Royal Army Medical Corps*.

6. Their Lordships approve of the senior medical officers at hospitals abroad being in charge of those establishments, subject to the authority of the Commander-in-Chief or senior officer in the same manner as in the case of the large hospitals at home, and directions will be issued to that effect. The necessary alterations will be made in the Naval List, the hospitals affected being Malta, Gibraltar, Bermuda, and Hong-Kong.

## THE VOLUNTEER RESERVE OF THE ROYAL NAVY.

The following Regulations concerning the appointment, training, and duties of medical officers of the Royal Naval Volunteer Reserve have just been made public, and the conditions of service are such that the Regulations will be of considerable interest to our readers. It will be observed that officers receive two periods of from 14 to 28 days' training afloat in one of His Majesty's ships as well as two courses at a naval hospital. The training, therefore, is designed to be thorough as well as interesting. The rates of pay appear to be equitable, and the inducement is held out that, in selecting medical men for the appointment of Surgeon and Agent at the various ports, preference will be given to those who hold commissions in the Royal Naval Volunteer Reserve. We think that there must be many members of our profession to whom this service will appeal favourably, especially those who, with a natural inclination towards the sea, have established themselves at a seaport or maritime station. The duties during the training period are not likely to be unduly arduous, and all who take up the work will feel that they are contributing some definite personal service for the defence of their country.

These are the Regulations:—

1. *Total Number of Officers.*—The total number of medical officers in the Royal Naval Volunteer Reserve (exclusive of "supernumerary" officers, to be 150, composed of eight Fleet Surgeons, 22 Staff Surgeons, and 120 Surgeons.

2. *Supernumerary Officers.*—In addition to the above numbers, certain officers may be retained in the lists as "supernumerary" under the following conditions; their names will be shown in the Navy List in italics.

3. *Conditions of Entry.*—Candidates for entry must—(*a*) not be over 32 years of age; (*b*) be registered under the Medical Act in force as qualified to practise medicine and surgery in Great Britain and Ireland; (*c*) be of pure European descent, and the sons either of natural-born British subjects or of parents naturalised in the United Kingdom. Applications for entry, stating full particulars of medical qualifications, should be submitted through the Admiralty Volunteer Committee for the consideration of the Admiralty. If a candidate's application is accepted, he will be enrolled in the reserve with the rank of Surgeon.

4. *Qualifications for Promotion.*—Surgeons who have completed eight years' service as Surgeon, have embarked for training twice during the eight years, and have been through two 14-day courses at a naval hospital, will be eligible for advancement to the rank of Staff Surgeon; Staff Surgeons who have completed eight years' service in that rank will be eligible for promotion to rank of Fleet Surgeon.

5. *Selection for Promotion.*—Promotion to the ranks of Staff Surgeon and Fleet Surgeon will be made by the Admiralty, as requisite to fill vacancies in the higher ranks, the promotion being by seniority tempered with selection.

6. "*Supernumerary*" *Surgeons and Staff Surgeons.*—Surgeons who complete eight years' service, and who, though eligible for promotion to Staff Surgeon, have not been advanced, may, at the discretion of the Admiralty, be retained on the Surgeons' List as "Supernumerary" (see paragraph 2). After completing eight years as "Supernumerary" (i.e., 16 years in all), they will be eligible to retire with the rank of Staff Surgeon, but may, at the discretion of the Admiralty, remain for another four years as "Supernumerary" on the Surgeons' List, in order to complete the 20 years' service required for the Volunteer Decoration. Retirement after completion of 20 years' service will be compulsory. Staff Surgeons who complete eight years' service in that rank, and who have not been advanced, may, at the discretion of the Admiralty, be retained on the Staff Surgeons' List as "Supernumerary," and may remain on that list until they complete 20 years' service in the Royal Naval Volunteer Reserve. "Supernumerary" Staff Surgeons who complete 20 years in the Royal Naval Volunteer Reserve will be placed on the retired list, and will be eligible for the rank of Fleet Surgeon at the discretion of the Admiralty. "Supernumerary" Surgeons and "Supernumerary" Staff Surgeons will be eligible for promotion to fill vacancies on the Staff Surgeons' and Fleet Surgeons' Lists.

7. *Retirement.*—(*a*) Surgeons who attain eight years' seniority without qualifying for promotion will be placed on the retired list. (*b*) "Supernumerary" Surgeons (paragraph 6) (except those promoted to Staff Surgeon) will be retired compulsorily after 20 years' service in the Royal Naval Volunteer Reserve, but may retire at any time at their option (16 years' service being necessary to qualify for retired rank of Staff Surgeon). (*c*) Staff Surgeons (including "Supernumerary" Staff Surgeons) may retire at any time at their option, but will be compulsorily retired on attaining 20 years' service in the Royal Naval Volunteer Reserve (except those promoted to Fleet Surgeon). Staff Surgeons who complete 20 years' total service before retirement will be eligible for the retired rank of Fleet Surgeon. (*d*) Fleet Surgeons may retire at any time at their option, but will be compulsorily retired on attaining the age of 52.

8. *Resignation.*—Officers who are not eligible for retirement under paragraph 7 will (when not called out) be permitted to resign their commissions.

9. *Association with R.N.V.R Divisions.*—Officers (except "Supernumerary" Surgeons and "Supernumerary" Staff Surgeons) will, as far as practicable, be attached to the Royal Naval Volunteer Reserve Divisions or outlying companies, and in such cases will be eligible to earn the capitation and special capitation allowance for such division or company under the conditions laid down in the Royal Naval Volunteer Reserve Regulations (one of which conditions is attendance at annual inspection). In cases where it is not practicable for an officer to be attached to a division or company he will be shown as "unattached," and no capitation or special capitation allowance will be payable for him. All "Supernumerary" Surgeons and Staff Surgeons will be "unattached."

10. *Training in Peace.*—(*a*) Surgeons, R.N.V.R., will be required to undergo the following courses of training, and to obtain certificates from the Medical Director General of the Navy that they have been instructed in these duties and have taken full advantage of the instruction; (*b*) Staff Surgeons, R.N.V.R., will be permitted to undergo the following courses of training, if they so wish and their services are required, under conditions similar to those laid down in the case of Surgeons, R.N.V.R. While so serving these officers will receive the pay of their rank and the usual travelling allowances. Certificates of training will be issued as for Surgeons, R.N.V.R.

*Training Afloat in one of H.M. Ships.*—Once in first four years' service and once in second four years' service as Surgeon, at an interval of not less than two years. The period of training will be from 14 to 23 days (at officer's option), and the course of instruction will be in: (1) The arrangements for the treatment of wounded in action; (2) the keeping and rendering of accounts and returns; (3) the victualling of the sick; (4) the method of sending patients to hospital.

*Hospital Course at a Naval Hospital.*—Once in the first four years' service and once in second four years' service at an interval of not less than two years. The period of course will be 14 days, and will embrace instruction in—(1) the routine of ward work; (2) the admission and discharge of patients; (3) the dieting of hospital patients; (4) the examination of recruits; (5) the method of keeping and rendering returns. "Supernumerary" Surgeons, "Supernumerary" Staff Surgeons, and Fleet Surgeons will not be eligible to undergo further training.

11. *Pay, &c., during Peace Training.*—While under training as above Surgeons R.N.V.R. will be paid as follows:—*Training afloat:* Surgeons under two years' seniority, 14*s.* per diem; Surgeons of two years' seniority, 15*s.* per diem; Surgeons of four years' seniority, 17*s.* per diem; Surgeons of six years' seniority, 18*s.* per diem. *Hospital course:* Pay as above and also hospital allowance at the usual naval rate. Officers will travel between their place of residence and H.M. ship or hospital at the public expense under the Regulations as laid down for naval medical officers of equivalent rank.

12. *Uniform.*—Officers before going through a course of training will be required to provide themselves with the following uniform:—No. 4 Frock Coat and No. 5 "Undress": Frock coat, undress coat (monkey jacket), morning waistcoat, trousers (plain, blue), white trousers (during summer months), cap (and cap covers from May 1st to Sept. 30th), sword and undress belt. No. 7 "Mess Undress": Jacket, evening waistcoat (blue), trousers (plain, blue). An allowance of £20 in aid of outfit will be granted to Surgeons on their completing their first course of training afloat or their first hospital course. In the event of an officer resigning within three years he is liable to refund the allowance paid to him.

13. *Capitation Allowances.*—A capitation allowance at the rate of 50*s.* annually will be granted for each medical officer who is attached to a division or outlying company (see paragraph 9) under the conditions laid down in the Royal Naval Volunteer Reserve Regulations, and is payable to the division concerned. An additional or special allowance at the rate of 30*s.* annually will be similarly granted for each "attached" Surgeon, Staff or Fleet Surgeon, who has completed both a course of training afloat and a hospital course.

14. *Service when "called out."*—Whenever the Admiralty call out the Naval Volunteers, or any of them, for actual service, they will be liable to serve either ashore or afloat, as may be directed by the Admiralty, and anywhere the Admiralty may have need of their services, with the understanding that those services shall, as far as practicable, be confined to Home waters and the Mediterranean. (2) As far as possible Fleet and Staff Surgeons and "Supernumerary" Surgeons, if required, would be utilised for shore appointments only.

15. *Pay when "called out."*—When called out, medical officers to be paid as follows: Surgeons under two years' seniority, 14*s.* + 8*s.* per diem (special allowance); Surgeons of two years' seniority, 15*s.* + 7*s.* per diem (special allowance); Surgeons of four years' seniority, 17*s.* + 5*s.* per diem (special allowance); Surgeons of six years' seniority, 18*s.* + 5*s.* per diem (special allowance); Staff Surgeons under two years' seniority, 20*s* + 5*s.* per diem (special allowance); Staff Surgeons of two years' seniority, 21*s.* + 5*s.* per diem (special allowance); Staff Surgeons of four years' seniority, 24*s.* + 5*s.* per diem (special allowance); Staff Surgeons of six years' seniority, 25*s.* + 5*s.* per diem (special allowance); Fleet Surgeons under two years' seniority, 27*s.* + 5*s.* per diem (special allowance); Fleet Surgeons of two years' seniority, 28*s.* + 5*s.* per diem (special allowance); Fleet Surgeons of four years' seniority, 30*s.* + 5*s.* per diem (special allowance); Fleet Surgeons of six years' seniority, 31*s.* + 5*s.* per diem (special allowance); Fleet Surgeons of eight years' seniority, 33*s.* + 5*s.* per diem (special allowance); Fleet Surgeons of ten years' seniority, 35*s.* + 5*s.* per diem (special allowance); together with hospital, lodging, and other allowances, under the same conditions and at same rates as those payable to naval medical officers.

16. *Pensions for Wounds.*—Officers who may receive hurts or wounds whilst on active service in the Royal Navy, or whilst undergoing training, will receive the same pensions and allowances as those to which officers in the Royal Navy of corresponding rank would be entitled in similar circumstances.

17. *Pensions for Widows and Children.*—Widows and children (if any) of officers who may be killed in action, or die from accident resulting from the performance of their duty, will receive the same pensions and compassionate allowances as the widows and children of naval officers of corresponding rank would be entitled to in similar circumstances.

18. When selecting medical practitioners for appointment as Surgeons and Agents or similar posts, the Admiralty will give preference to candidates who hold commissions in the Royal Naval Volunteer Reserve.

## ROYAL NAVY MEDICAL SERVICE.

The following appointments have been notified:—Fleet-Surgeons: H. Clift to the *Argonaut* and for group of ships of Third Fleet; A. Maclean to the *Lion*; J. C. Ferguson to the Royal Marine Artillery; G. T. Reid to the *Hindustan*; and H. C. Arathoon to the *Goliath*. Staff-Surgeons: H. Cooper to the *Vivid*; and A. Woolcombe to the *Venus*, and to the *Woolwich*, on commissioning. Surgeon: H. M. Whelan to the *Essex*, on commissioning.

## ROYAL ARMY MEDICAL CORPS.

Surgeon-General L. E. Anderson, C.B., Deputy Director of Medical Services to the Irish Command, has been placed under orders to attend the board of Surgeon-Generals to be held at the War Office for the selection of medical officers for promotion.

Lieutenant-Colonel J. F. Donegan, recruiting medical officer at Woolwich, has been placed under orders to embark for a tour of service with the Southern Army in India, and on arrival will be appointed to the Ninth (Secunderabad) Division for duty. Lieutenant-Colonel M. O'D. Braddell, on return home from the Military Hospital at Cawnpore Cantonment, has been appointed to the Irish Command for duty. Lieutenant-Colonel A. T. I. Lilly has been transferred from Belgaum Cantonment and appointed to hold charge of the Military Hospital at Colaba, Bombay. Lieutenant-Colonel C. W. H. Whitestone, Deputy Assistant Director of Medical Services to the Third (Lahore) Division of the Northern Army in India for mobilisation, has been placed under orders to embark at Bombay for home on Dec. 19th. Lieutenant-Colonel M. W. Russell, instructor of medical services at the Staff College, Camberley, has been placed under orders to embark for a tour of service at Malta. Lieutenant-Colonel W. H. Starr has taken over charge of the Military Hospital at Lichfield. Lieutenant-Colonel C. W. R. Healey has joined the London District on return home from Nasirabad Cantonment.

Major C. C. Cumming has embarked for a tour of service in Malta. Major H. F. G. Stallard has been selected for appointment as Deputy Assistant Director of Medical Services to the Fifth (Mhow) Division of the Southern Army in India for mobilisation, in succession to Captain M. B. H. Ritchie, whose tenure of the appointment has expired. Major E. W. Slayter, on return home from India, tour expired, has been placed under orders to join the Irish Command on Jan. 12th next, and on arrival will be appointed to the Cork District for duty. Major J. V. Forrest has arrived home for duty from the Military Hospital at Khartoum. Major W. A. Woodside has been transferred from the Military Hospital at Chakrata to Agra Cantonment. Major N. Faichnie has been appointed Senior Medical Officer on board the transport s.s. *Rewa*, which leaves Bombay for Southampton on Dec. 10th with time-expired troops. Major E. Bennett has been transferred from the Military Hospital at Poona Cantonment and appointed Senior Medical Officer at Purandhar. Major A. W. A. Irwin has joined for duty at Clonmel. Major E. P. Connolly has been transferred from the Military Hospital at Murree Cantonment and appointed Deputy Assistant Director of Medical Services to the Second (Rawal Pindi) Division of the Northern Army in India, in succession to Major G. St. C. Thorn, whose tenure of the appointment has expired. Major F. Harvey has embarked for a tour of service in India.

Captain L. A. A. Andrews has been selected for appointment as Specialist in Dermatology and Venereal Diseases to the Northern Command (England). Captain H. W. Russell has embarked for a tour of service with the Third (Lahore) Division of the Northern Army in India. Captain H. V. Bagshawe has been transferred from the Military Hospital at Cairo to Alexandria. Captain R. T. Collins has taken up duty at the Military Hospital, Glencorse, on transfer from Buddon Camp. Captain T. W. Browne on arrival home from the Military Hospital at Jhansi Cantonment, tour expired,

has been placed under orders to join the Irish Command on Dec. 12th, and on arrival will be appointed to the Cork District for duty. Captain A. C. Elliott has been appointed for duty on board the transport s.s. *Rewa*, which leaves Bombay for Southampton on Dec. 10th with time-expired troops. Captain G. S. Wallace has embarked for a tour of service with the Ninth (Secunderabad) Division of the Southern Army in India. Captain D. G. Carmichael has been transferred from the Military Hopital at Campbellpore Cantonment to Khanspur, Murree Hills District. Captain B. G. Patch has taken up duty at Derby on transfer from the Military Hospital at Nottingham. Captain V. T. Carruthers has taken up duty at the Military Hospital, Norwich. Captain P. C. T. Davy has joined the Royal Army Medical College, Grosvenor-road, for the promotion course of instruction to the rank of Major. Captain J. R. Foster has been granted leave of absence home from India for six months, with permission to revert to the Home Establishment at its expiration. Captain G. R. Painton has been transferred from the Military Hospital at Colchester to the Royal Army Medical College, Grosvenor-road, S.W. Captain J. Mackenzie has embarked for a tour of service with the Eighth (Lucknow) Division of the Northern Army in India. Captain M. Keane has been transferred from the Military Hospital at Bulford Camp, Salisbury Plain, to Tidworth. Captain G. B. Edwards has been appointed to the Eastern Command on transfer from Leicester. Captain D. de C. O'Grady has been appointed for medical duty on board the transport s.s. *Dongola* leaving Bombay for Southampton on Dec. 19th with time-expired troops. Captain T. C. C. Leslie has been transferred from the Military Hospital at Cork to Youghal. Captain E. C. Phelan has taken up duty at the Military Hospital, Dinapore, on transfer from Barrackpore. Captain H. J. Crossley has embarked for a tour of service with the Northern Army in India, and on arrival will be appointed to the Seventh (Meerut) Division for duty. Captain O. C. P. Cooke has been transferred from the Military Hospital at Cork to Tipperary. Captain B. Varvill has taken up duty at the Military Hospital, Mhow Cantonment, on transfer from Nasirabad.

Lieutenant A. S. Heale has embarked at Malta for a tour of service in India. Lieutenant P. Hayes has been transferred from the Military Hospital at Bangalore Cantonment to Poonamallee. Lieutenant F. C. Davidson has taken up duty at the Military Hospital, Glasgow, on transfer from Edinburgh. Lieutenant J. C. Sproule has joined at Devonport. Lieutenant L. Buckley has embarked for a tour of service with the Northern Army in India, and on arrival will be appointed to the Third (Lahore) Division. Lieutenant J. M. Elliott has been transferred from the Military Hospital at Winchester to Hilsea for duty. Lieutenant T. H. Balfour has joined the Military Hospital at Inverness. Lieutenant E. B. Allnutt has embarked for a tour of service with the Sixth (Poona) Division of the Southern Army in India. Lieutenant D. T. M. Large has been transferred from Stobs to the Military Hospital at Edinburgh. Lieutenant C. J. H. Little has taken up duty at Strensall on transfer from the Military Hospital at York. Lieutenant E. C. Deane has embarked for a tour of service with the Northern Army in India, and on arrival has been directed to join the Seventh (Meerut) Division for duty. Lieutenant C. M. Ingoldby has been transferred from the Military Hospital at Fermoy to Cork for duty. Lieutenant H. W. L. Allott has taken up duty at Galway on transfer from the Military Hospital at the Curragh Camp.

### INDIAN MEDICAL SERVICE.

Lieutenant-Colonel S. H. Henderson has been granted three months' extension of general leave of absence home from India. Lieutenant-Colonel J. Crimmin, V.C., C.B., C.I.E., has been selected for advancement to the rank of Colonel, in succession to Colonel C. F. Willis, C.B., Assistant Director of Medical Services to the Ninth (Secunderabad) Division of the Southern Army. Lieutenant-Colonel R. G. Turner has been transferred from Naini Tal to Moradabad and appointed Civil Surgeon. The services of Lieutenant-Colonel R. Robertson have been placed permanently at the disposal of H.E. the Commander-in-Chief in India. Lieutenant-Colonel G. McI. C. Smith has taken up duty as Superintendent of the District Jail at Ludhiana.

Major T. S. B. Williams has been selected for appointment as Civil Surgeon at Dera Ismail Khan. Major W. E. McKechnie has taken up duty at Etawah as Civil Surgeon. Major H. C. Buckley has been appointed to officiate as Civil Surgeon at Bulandsahr on return to duty from leave of absence. Major W. G. Richards has been appointed to Madras Presidency for duty. Major E. C. MacLeod has been selected for appointment as officiating Inspector-General of Civil Hospitals and Sanitary Commissioner in Assam on relief by Major W. D. Ritchie. Major E. L. Ward has returned to India from leave of absence home. Major R. Steen has been transferred from Bulandsahr to Aligarh and appointed Civil Surgeon. Major E. E. Waters has been appointed to officiate as Professor of Materia Medica at the Medical College, Calcutta, during the absence on seven months' leave of Major D. McCay. Major R. W. R. Knox, residency surgeon at Mysore, has been granted privilege leave of absence for three months combined with furlough for 11 months.

Captain C. L. Dunn, Deputy Sanitary Commissioner to the United Provinces of Agra and Oudh, has been granted leave of absence home from India for six months. Captain O. A. R. Berkeley-Hill has been appointed to Bombay. Captain W. D. H. Stevenson, assistant to the director of the Bombay Bacteriological Laboratory, has been granted privilege leave of absence combined with study leave for 13 months. Captain W. H. Riddell has returned to India. Captain H. B. Steen has been selected for advancement to the rank of Major. Captain F. C. Frazer has been appointed to officiate as District Medical and Sanitary Officer at North Arcot. Captain D. G. Cooper has been selected for appointment as Specialist in Electrical Science to the Fifth (Mhow) Division of the Northern Army in India. Captain J. M. Crossle has been granted six months' leave of absence. Captain P. L. O'Neil has been granted 18 months' combined and study leave home from India. Captain J. Anderson has been selected for appointment as Civil Surgeon at Miranshah. Captain P. M. Rennie has joined at Delhi. Captain R. F. Hibbert has been granted an extension of leave of absence home from India for two months.

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LONDON SCHOOL OF CLINICAL MEDICINE (POST-GRADUATE).—The annual dinner of the Post-Graduate Medical School in connexion with the "Dreadnought" Seamen's Hospital, Greenwich, was held on Friday, Nov. 28th, at Princes' Restaurant. Surgeon-General Arthur W. May, C.B., Medical Director-General of the Royal Navy, presided, and the company numbered about 160, of whom about 30 belonged to the Navy Medical Service. Among those present were Sir Thomas Barlow, President of the Royal College of Physicians of London; Sir Archibald Geikie, President of the Royal Society; Sir Francis Champneys, President of the Royal Society of Medicine; Sir Dyce Duckworth, senior physician to the hospital; Surgeon-General Sir Launcelotte Gubbins, Surgeon-General Sir James Porter, Sir John Rose Bradford, Sir Havelock Charles, Sir Malcolm Morris, Sir StClair Thomson, Professor R. T. Hewlett, Sir William Bennett, Sir J. Mackenzie Davidson, Dr. G. Newton Pitt, Sir Robert Burnet, and Mr. William Turner and Mr. P. J. Michelli, respectively senior surgeon and secretary to the Seamen's Hospital. The chairman, in proposing the toast of "The London School of Clinical Medicine," said that although the work of the post-graduate school was appreciated by the medical profession and by those interested in scientific work, it was doubtful whether the general public was so appreciative. Post-graduate schools acted upon the principle that there was no such thing as standing still in medical and surgical science. At the present time they were on the wave, if not at the top of the wave, of an extraordinary advance in medical science. He concluded with an acknowledgment of the great service which the "Dreadnought" College was doing for the *personnel* of the Navy through the post-graduate education of naval medical officers. The toast was responded to by the Dean, Mr. C. C. Choyce, who reviewed the work and progress and needs of the school. Sir Archibald Geikie, in proposing the health of the medical profession, spoke of the remarkable changes which had taken place during the past 300 years in the position of medicine. In all directions medical men had not only advanced their own profession, but to a very large extent they had gone out of their own sphere and advanced other branches of science. In reply, Sir Thomas Barlow returned the compliment by pointing out that the enormous medical advances of recent years had been due to the help gained from the auxiliary sciences. He maintained, amidst applause, that the future progress of medical science would depend upon the thoroughness of the scientific training of the men of to-day, while claiming that the value of the work of past generations should receive its due place in the education of the student. Sir James Crichton-Browne, who also responded, touched upon various subjects—from quack medicines to the passage of the œsophageal tube—in his own inimitable manner. Finally, the chairman's health was proposed by Captain H. B. Hooper, who spoke warmly of the Medical Director-General's commonsense and broad outlook, and his early prowess as an international footballer; and Surgeon-General May replied in a few sailor-like words.

# MEDICAL PRACTICE UNDER THE INSURANCE ACT.

(FROM OUR SPECIAL COMMISSIONER.)

(*Continued from p. 1575.*)

## XXIX.—THE WORKING OF THE ACT IN DEVONSHIRE: RESISTANCE IN EXETER.

EXETER is one of those towns where the antagonism to the Insurance Act was and still is particularly pronounced. Members of the medical profession felt that they should not go on the panel, and subscribed liberally to a defence fund for the benefit of practitioners undergoing losses through their refusal to work the Act. It is calculated that the subscriptions amounted to an average of £10 from each medical man. This money was not all called up, but it was ready when wanted. It would be difficult to find a town in which the objection to serving on the panel was more unanimous. Nevertheless, the resistance collapsed here as elsewhere, and quite suddenly. The news that at Bradford the struggle had ceased was a severe blow, yet the refusal to serve was maintained to the last hour. It ended, indeed, I was informed, in a dramatic manner. A large number of practitioners had gathered together to decide on the reply that should be given to an intimation from the Local Insurance Committee that was understood to be final. While the discussion was proceeding a telegram was brought in from a friend at headquarters announcing that there were 14 practitioners ready to be sent down to Exeter, where a panel would then be formed that would be closed against all the local practitioners—and this for a long period, probably two years. Now it will be readily understood that Exeter and Devonshire generally are particularly vulnerable in respect to the importation of practitioners, as any number of men, having decided that to form a panel in such circumstances was correct, would be pleased to exchange such districts as the Black Country and various forbidding industrial parts of the North, where there is but little polite society and a much harsher climate, for the beautiful West of England. Upon the receipt of the ominous telegram the meeting decided that it could not take the responsibility of urging practitioners to keep away from the panel at the risk of starving their families. In Exeter there were practitioners who so depended on club practice that, if a panel was formed and they were excluded from it, they would lose their whole livelihood. Sufficient money was not forthcoming adequately to compensate these men if they continued to hold out. When permission was thus given by the medical profession for serving under the Act, six practitioners at once joined the panel, and it is acknowledged that certain of them, at any rate, could not possibly have done otherwise, so that no animosity was felt against them. They joined the panel with the consent of the profession, and it was necessary that at least six should join. This was not a large number considering the work to be done, but it was large enough to prevent the Insurance Committee importing outside practitioners.

### *Friendly Societies Side with the Profession.*

The policy that followed was to stand out from the panel as much as possible, and among the profession at Exeter there are some who must have lost many hundreds of pounds in carrying out this policy. As some of the six doctors on the Exeter panel are also on the panel of the county of Devon, it was calculated, I am quite at a loss to say how, that the panel of the town of Exeter could in reality only count on the services of four and a half doctors. In the face of this insufficiency the Insurance Committee would have brought down some strangers but for the fact that the medical profession found altogether unexpected allies in the representatives of the Friendly Societies. This is the first instance in my experience of the working of the Act where the medical profession and the Friendly Societies have joined hands, and its success makes me wonder at its singularity. Representatives from both sides met and held amicable converse together.

To account for this, it was pointed out to me that in Devonshire there is not the same class hostility that is to be found in other parts of the country. The mass of the people look upon their doctors with quite unusual regard. It is not only the hospital surgeon or physician whose kindness and skill are extolled, for this sort of eulogy is fairly common, but it is the rule of the country-side apparently to like and respect the medical practitioner. Consequently the Insurance Committee knew full well that the insured community would resent any high-handed action taken against the local medical profession. Therefore, when a proposal was made to import medical men in order to form or enlarge the panel, representatives of the Friendly Societies on the Insurance Committee opposed the movement, and nothing was done. This action of the Friendly Societies was quite unselfish. They had no material advantage in view, but they shared in the very strong feeling of local patriotism that prevails throughout Devonshire, and therefore intervened against the introduction of "foreigners."

Nevertheless the undermanned panel was not a satisfactory affair. The men on the panel, or at any rate some of them, doubled their incomes, and this was, in a measure at least, represented by the losses of those who were not on the panel. But three more local medical practitioners have now joined, and there are at present nine doctors in the service of the Act, a number which is none too high, in my opinion.

The county borough of Exeter has a population of 49,000; of these, 15,500 are insured persons, and it is thought they will reach one-third of the total population before the last have come in, so this makes more than an average of 1700 persons for each panel doctor. But here, as elsewhere, the distribution of insured persons is very unequal. Thus one panel doctor at Exeter is stated to have 3600 insured persons on his list, and also does some work for the county. Another panel doctor has over 3000 insured patients, and the question has been raised here as to whether the Insurance Committee should allow this, the arguments used being those which I have reported as being employed in other localities.

### *The Results of a Weak Panel.*

Though the Friendly Societies have objected to the importation of outside medical men, they and others nevertheless complain of the weakness of the medical service. They do not want "foreigners," but they wish for more local men. I was informed that, in order to prove their contention that the panel as at present constituted is still undermanned, they have invited from their members evidence of inefficient medical machinery.

Such evidence, in the form of complaints, must be made in writing, according to the Act, and is not easily forthcoming. People grumble, but do not care to face the trouble which a written statement might bring upon them; or when they sit down to describe their injuries the importance of them disappears. The Friendly Societies have now approached the medical men and asked if they could do anything to improve actual conditions. Emphasis was laid on the fact that a fresh scheme was demanded by the Friendly Societies and not by the profession. It is in response to this request that a good deal has been said as to the advisability of establishing the pool system on the Manchester and Salford model. But as the actual panel doctors have made substantial profits through obtaining something like a monopoly, their privilege would disappear if the pool system was established; the insured having a much larger choice of medical men, the present panel doctors would lose many of their patients. It is also doubtful whether the Commissioners would sanction such a change; yet there is no question but that the Act is working badly in Exeter as matters now stand, and the insured are far from satisfied.

*The Largest County Area in England.*

The position of the administrative county of Devon is also peculiar. It is the largest county area in England, but has only a population of 457,000, of whom about 135,000 are insured. There are 286 doctors on the county panel. It is not possible to say how many practitioners might be available for this service, for there are so many medical men who have retired from active practice and have elected to reside in various parts of Devonshire. But it may be said that nearly all the practitioners who are in active service have joined the panel excepting those who reside in some of the bathing and health resorts. These resorts are numerous, for Devonshire has the advantage of possessing two sea coasts. But the health station practitioners never had club patients; they generally attend visitors who live in hotels. In the small towns and rural parts of Devonshire there used to be a good many clubs and local village societies, as well as the big organisations, but these have disappeared.

At first the county was divided up into 24 insurance sub-districts or sub-areas, and a county Medical Committee was formed on the basis of one representative from each of these districts, together with a few coöpted and *ex-officio* members. Later the insurance districts were reduced, by order of the Commissioners, to only 13, but the Medical Committee for the county was not altered. Each of the 13 sub-areas or districts has a local sub-insurance committee of its own. After due consideration the medical profession decided that no medical man should serve on these local subcommittees. It was felt that it would never do to allow these subcommittees, considering their composition, to deal with medical questions. The central county Insurance Committee, Medical Service Subcommittee, and the general county Medical Committee were very much stronger and better informed bodies, and to them and them alone should any difficulty relating to medical practice be referred. Sir Ernest Satow is the chairman of the Medical Service Subcommittee of the Devon Insurance Committee, and it consists of six members, including three medical men. It is a strong committee, and the profession can have no objection to submitting to its judgment, but they cannot confide their interests and their professional honour to the keeping of a number of little local subcommittees. No hitch has taken place between this Medical Service Subcommittee and the general Insurance Committee of the administrative county of Devon, yet some difficult matters have arisen from time to time.

For instance, a considerable number of tuberculous patients are sent to Devonshire from various parts of England on account of its more favourable climate, but no satisfactory arrangement has yet been made for the payment of the expenses incurred in attending to these outsiders. Provision is now being made to supply 70 beds for advanced cases, 20 for observation cases; 20 more beds have been secured in homes at Torquay; and there are 60 open-air shelters; altogether there will soon be 270 beds for tuberculous patients in various stages of the disease. This, it is claimed, is only a beginning, which has been forced upon the county council by the Insurance Act. The health and insurance authorities are going to provide for the entire community, excluding only those who are well enough off to attend to themselves, but insured persons coming from other counties must be made to pay for their maintenance, as this cannot be charged to the Devonshire ratepayers.

*The Mileage Difficulty.*

The greatest difficulty is the question of mileage. An allowance of £3000 a year has been granted by the Government, but £5000 would probably not have been too much. An addition is made to the capitation grant when the patient lives more than two miles from the panel doctor's residence, and there are special terms for such places as Dartmoor and Exmoor.

Of course it must be remembered that the panel doctors are not troubled by trivial cases in these thinly populated districts, as the distances are prohibitive. Nor need they fear any competition or the importation of doctors from other parts of England. Places where there are from 200 to 400 insured persons would not yield a sufficient income to tempt any opposition from without, and the imported doctor would not get any of the private patients of the neighbourhood. As matters now stand, the panel doctor having to provide medicine receives 9*s.* a year, and 11*s.* for all who live more than two miles away. Whether this is sufficient depends entirely on the mileage. Thus one medical man told me of a case of pneumonia where the patient lived eight miles away. The journey there and back meant 16 miles, of which 12 miles were beyond the two-mile radius. The panel doctor had to pay this patient 40 visits. The roads were so bad that he could not employ either a carriage or a motor-car, but had to ride the whole of the 640 miles, or 40 journeys of 16 miles each, on horseback. Many years of good luck, that is of capitation fees from healthy persons, will be needed to make up for such a strain as this.

If we do not count the 36 principal towns of Devonshire, the country districts remaining have only 0·23 inhabitant per acre. It has been calculated that in some parts of the county the distance between each insured person is on an average half a mile, and there are districts where this average is a good two miles. The roads in these sparsely populated places are bad, and in many localities a horse is the only means of going over the ground.

As a rule, only young, vigorous men, fond of the country and outdoor life, attempt such work. After they reach middle age they generally sell their practice and go to towns, or at least to better populated districts, where the exposure and physical strain are not so great. At times, also, it is absolutely dangerous to cross the moors, and loss of life has not infrequently occurred during snow or fog. When there is real danger to life medical practitioners are not obliged to answer a patient's call, but I have never heard of this plea being urged. At Dartmoor there is a dwelling that is 16 miles away from the nearest doctor. There is a telegraph station at hand, and it is no trifling matter to receive a telegram to start on a 16-mile journey over this bleak and, in certain seasons, dangerous moor. It is evident that the panel practitioner would require a good many patients who asked no services to counterbalance the incidence of a case requiring frequent attention in this outlying homestead.

*(To be continued.)*

# Home and Foreign Notes.

(FROM OUR OWN CORRESPONDENTS.)

## SCOTLAND.

*National Health Insurance in Scotland.*

THE Scottish Insurance Commissioners have issued a memorandum revising the conditions of medical benefit to be given for the year commencing Jan. 12th, 1914. The new regulations deal, firstly, with the allocation of insured persons who remove from their given address either (1) permanently or (2) temporarily. Upon permanent or semi-permanent removal insured persons can make a fresh choice of the method by which they will receive medical benefit in their new place of residence. Upon temporary removal all persons may elect to be treated either by a panel doctor or an approved institution, but on returning to their original residence they revert to the arrangement originally made. Persons making their own arrangements will on permanent removal be obliged to make a fresh choice of method; during temporary absences from home they will be able to obtain treatment at their own expense, and apply for a contribution from the committee by whom permission has been granted. Clauses 13 and 14 of the doctors' agreement have been so altered as to obviate the need for appeal to the courts in disputes between doctor and Insurance Committee. They have also been altered to meet the difficulties which are experienced by Insurance Committees in dealing with breaches of the agreement which are either too grave or not sufficiently grave for the remedies provided. Transference of insured persons is inadequate to meet the case of a doctor who leaves his practice without due notice or without providing a deputy. Even removal from the panel is fruitless in the case of one who has already withdrawn from the panel. To meet such cases of gross neglect provision has been made for recovery of damages under the agreement, and for empowering the committees to refund to the insured person out of the money recovered or retained the expenses reasonably and necessarily incurred in obtaining requisite treatment.

*Distribution of Insurance Surplus in Glasgow.*

An important decision has been arrived at by medical men in Glasgow regarding the allocation of the surplus money accruing under the Insurance Act in connexion with those persons who have not yet chosen their panel doctor. Last week a meeting of medical men serving on the panel was called by the Burgh Insurance Committee, when the point was fully discussed. It having been made clear that all the persons who have not yet chosen a doctor have to be distributed amongst the members of the panels, the points before the meeting were whether the patients should be divided equally amongst all the practitioners or whether they should be given to those doctors whose lists of patients do not exceed a certain number. The free expression of opinion by the meeting disclosed a general feeling that there was no desire to swell the large lists of certain doctors, with whom, of course, insured persons were at liberty to contract if so desired. Ultimately it was agreed to recommend that the patients should be allocated amongst those doctors on the panel whose lists do not contain more than 1500 names. It is estimated that there are about 50,000 persons in Glasgow who have not yet chosen their panel doctor. The recommendation of the meeting has yet to be considered by the Burgh Insurance Committee, and later by the Insurance Commissioners, but it is anticipated that the decision arrived at will terminate the question so far as it affects Glasgow.

*Dundee Insurance Panels.*

At a meeting of the Dundee Insurance Committee held on Nov. 26th the proposal that doctors, in addition to the present hours of attendance given in surgeries, from 6 to 8 P.M., should give attendance from 9 to 10 A.M. and from 2 to 3 in the afternoon, was defeated. The representative of the doctors said if those hours were required of them they could not possibly get through their work.

*Diphtheria in Aberdeen.*

For four months diphtheria has been prevalent in epidemic form in Aberdeen, and there is no appreciable falling off in the number of cases notified week by week. In all about 1100 cases have been notified from the beginning of August, while last month alone, according to school board reports, 332 children in the city suffered from diphtheria.

Dec. 2nd.

## IRELAND.

*The Certification Question.*

THE committee of inquiry on alleged excessive sickness and malingering under the National Insurance Act has not yet completed its investigations, and as a consequence no arrangement as to certification has yet been made between the Insurance Commissioners and the medical profession. It is generally believed that the Commissioners are not satisfied with the working of the panel and that some other amended scheme will be brought forward. It is worth recalling that the medical profession never thought the panel system a good one, and only accepted it, in so far as it was accepted, because they were told that no other was possible. It is likely that for the future a pooling scheme will be adopted, somewhat on the lines of the pooling scheme for medical benefit at present at work in Manchester. This would have at least two important advantages—remuneration in proportion to work done and applicability to the entire profession. The disadvantages could be readily avoided by a little foresight.

*Dublin University Biological Association.*

The subject of discussion at the opening meeting of the University Biological Association this session was Chronic Intestinal Stasis, when the President, Mr. Seton Pringle, read a comprehensive and clear paper, and was followed by Mr. H. M. W. Gray, of Aberdeen, who received a hearty welcome to a Dublin medical platform. After the meeting the outgoing President, Dr. W. Geoffrey Harvey, entertained a large number of guests at a smoking concert.

*Apothecaries' Hall.*

Last Saturday, Nov. 29th, the Governor of the Apothecaries' Hall, Alderman McWalter, M.D., entertained a large company of guests to dinner at the Hotel Metropole. The Recorder of Dublin, Mr. T. L. O'Shaughnessy, K.C., in responding to the toast of "The City of Dublin," referred to the housing conditions of the working classes of Dublin, and declared that much of the crime which came before him in his official position was directly due thereto. Among the other visitors who spoke were the President of the Royal College of Surgeons, the President of University College, and the President of the Incorporated Law Society. A pleasant musical programme was provided.

*Bangor Hospital for Infectious Diseases.*

The Bangor urban council have decided to provide an infectious diseases hospital with 20 beds, with disinfector and ambulance, which, with the purchase of a site, is estimated to cost £4000; and they have also agreed to a financial scheme for the repayment of the loan, wages of caretaker, coal and lighting, services of medical officers, nurses, and upkeep (£460). As Bangor is increasing so much in valuation, it is thought the provision of such a necessary institution as an infectious diseases hospital will not occasion any increase in the rates. Bangor, situated on Belfast Lough, is a great summer health resort for north of Ireland people.

*Death of Dr. D. Lynch, Ballyvourney.*

The announcement of the death of Dr. Daniel Lynch, the dispensary medical officer of Ballyvourney, has been received with great regret in the district. He was a prominent figure in the life of the south of Ireland. His early life was highly adventurous. When quite a young man, on learning that Garibaldi had invaded the Pope's possessions, he proceeded to Italy, became a Papal Zouave, and fought through the whole campaign. Later, when war broke out between France and Prussia, he joined cause with the French and took part in many of the important engagements. After peace had been proclaimed he emigrated to America and lived the hard life of an exploring pioneer in the Rocky Mountains. He came back to Ireland, became a medical student, and when 40 years of age took the degrees of M.D. and M.Ch. at the Queen's University in the year 1881. Soon afterwards he was appointed dispensary medical officer of the Ballyvourney district, near Macroom, and readily attained for himself a reputation as a zealous and accomplished physician, a friend of the poor, and a devoted patriot. He spoke the Irish language fluently, and came to the practical aid of his poorer neighbours in Munster by starting a school for the manufacture of Irish lace. He continued to discharge his professional duties till the end of his life.

*The late Mr. Thomas Wilson, Edgeworthstown.*

The death occurred on Nov. 23rd of Mr. Thomas Wilson, M.R.C.S. Eng., L.R.C.P. Irel., J.P., of Edgeworthstown. He received his medical education at the Meath Hospital, and took his qualifications in 1866. For 45 years he had practised in county Longford, and the news of his death has been received with widespread regret. He was warmly esteemed by all creeds and parties as a doctor, magistrate, and a friend of the poor. The large attendance at Moatefarrell Cemetery on Nov. 25th bore ample testimony to his popularity.

Dec. 2nd.

## PARIS.

*The Sale of Habit-forming Drugs.*

THE discussion at the Académie de Médecine on the sale of toxic and habit-forming drugs continues, and both the medical and pharmaceutical professions are worked up over it. It is only in virtue of a previous tolerant laxity that the pharmacist has been allowed to make up afresh a prescription that, as shown by the stamp of a former dispenser, has been previously dispensed. The proposal to forbid it by law in the case of dangerous and habit-forming drugs is meeting with fierce resistance at the hands of the chemists, who derive great profit from the practice, even in some cases greatly overcharging on account of the irregularity. Many speakers at the Academy gave instances of the dangers arising from the practice. Cases of self-treatment in sore-throat by means of a prescription borrowed from a friend have been found too late to be diphtheria. M. Reynier cited cases of unsuspected strychnine poisoning in prostatics. M. Hayem even went so far as to say that nowadays a large proportion of the cases of illness in town practice are due to drug addictions. He would even have the rule calling for a fresh prescription made to apply to the pharmaceutical preparations that are now sold without any prescription at all, many of which contain aconite, opium, digitalis, chloral, or urotropine, all drugs too dangerous to be left without surveillance in the hands of a patient. The abuse of urotropine, particularly by subjects of gout and renal diseases, has made great strides of late. The pharmacists' case was put before the Academy without any great force by the members of the pharmaceutical section, who contended that the new law would greatly upset the habits of the public and commercial methods, and would be inapplicable. The Academy, however, decided, with only five dissentient votes, that prescriptions calling for listed poisonous substances should not be renewed without a specific authorisation from the writer of the prescription.

*Medical Fees Due by a Magistrate.*

A curious case has recently been decided in the law courts. A magistrate had been treated by a prolonged course of massage for the results of an injury. His medical attendant claimed a fee of 100 francs; the magistrate valued his services at 65 francs. This sum the medical man declined to accept, and brought an action, naturally in the court in another district, as the defendant could not be judge in his own case. But the magistrate in the other district decided in favour of his colleague, and to punish the doctor for his audacity ordered him to pay the entire costs, which amounted to 100 francs. The text of the judgment, which has been published in the press, gives the most extraordinary grounds for the decision. It alleges that the justices of the peace are very ill paid (in Paris they receive 10,000 francs per annum), that the quarter in which the patient dwelt was a popular suburb where the fees of medical men ought to be extremely moderate, and that the official standing of

the medical man, who is a *médecin en chef* of a hospital, is of no account, because, it is stated, these titles are now obtained more by influence than by the strictness of the competition or by personal merit. This monument of jurisprudence cannot be upset, for in cases involving less than 500 francs the decisions of the justice of the peace do not admit of appeal.

*The Bacillus of Koch in Erythema Nodosum.*

The relation between erythema nodosum and tuberculosis has long been suspected. Professor Landouzy has for some time asserted such a relationship, and the view is now generally accepted. But hitherto the belief has been dependent merely on a clinical basis without any anatomical substratum. In a case recently published by M. Landouzy he has succeeded in demonstrating in a fragment of an erythematous patch excised during life the presence of Koch's bacillus inside the blood-vessels. The search for the bacillus in the blood, it is true, both by direct examination and by cultures, proved fruitless; but the inoculation of guinea-pigs gave positive results. This result definitely establishes Professor Landouzy's view.

Dec. 1st.

## VIENNA.

*Radium in Cancer of the Upper Respiratory Tract.*

AT a recent meeting of the Vienna Gesellschaft der Aerzte Dr. Marschik showed five cases of cancer which he had treated—and with apparent success—by radium. The first patient was a man, aged 69 years, suffering from cancer of the maxillary antrum of such an extent that operation was out of the question. The man received 2600 milligramme hours of radium application. Another man, 59 years old, with cancer of the left pyriform recess, had any affected glands first removed from his neck, and then he was treated with 1700 milligramme hours. He now speaks and swallows normally. A man, aged 46 years, suffering from "Trotter's" tumour (a tumour causing deafness, paralysis of the levator muscles of the palate, and violent pains because of its situation in the epipharynx near the tubes and involving the trigeminus nerve), was treated with 2000 milligramme hours. He suffered a recurrence, which promptly disappeared after a second course of 1500 milligramme hours. Another patient, a man aged 70 years, had a cancer of the left tonsil involving the left region of the cheek and the base of the tongue. He had 1350 milligramme hours. As there were no glands manifestly attacked none were removed. The last patient was a woman, aged 74 years, suffering from a tumour of the soft palate with partial necrosis. Here the diagnosis was uncertain until microscopic examination proved the tumour to be a round-cell sarcoma. She received 1200 milligramme hours, and recovered completely after three weeks. All other cases had been operated on, except the first mentioned, before the radium was applied, as it is the principle to remove as much as possible of the neoplasm. The cases showed that moderate doses of radium were sufficient to obtain satisfactory results. It is now absolutely proved that cancer of the upper respiratory tract can be cured, at least temporarily. Microscopic examinations were, of course, made in every case, and the patients were kept under observation in the clinic during and after treatment.

*Some Problems of Measles.*

In a paper recently read by Dr. Friedjung before the Society for Internal Diseases in Vienna he discussed three important questions connected with measles—namely, (1) immunity against measles; (2) the period of incubation; and (3) recurrence or reinfection. He said that he had seen only three cases of immunity against infection which could be considered as absolute, but there were certainly many persons temporarily immune, perhaps owing to the quantity of virus being too small. The period of incubation was regarded as being between 13 and 14 days, but cases were known in which 21 days elapsed between infection and the appearance of the exanthem. This point needed much observation before it could be regarded as settled. There was a general belief that measles might attack some persons repeatedly, but the best observers denied this, and, in fact, it was possible to show that the reported cases were erroneous. In order to be free from doubt the following requirements should be fulfilled before a case could be considered as a "repeated attack": (1) Both attacks must be in due connexion with an undoubted outbreak of measles, after the typical incubation period of 14 days, or they must be followed, after 14 days, by an outbreak of measles in the persons of their surroudings; (2) both attacks must show the typical Koplik spots before the outbreak of the exanthem on a particular day; (3) both attacks must show the typical affection of the conjunctivæ and the upper respiratory organs; (4) atypical behaviour of the infection tended to disprove the reliability of the observations—for instance, if a case remained solitary, although in contact with susceptible persons, or if any typical symptoms (Koplik's sign, pyrexia) were absent; and (5) it was desirable that several medical men should see the case. Some observations dealing with a recurrence of measles in the same person after a short time, such as from three to five weeks, seemed to be well founded, and in the discussion following the reading of the paper several such cases were mentioned in which there was no doubt possible.

*Prophylactic Measures against Occupational Skin Diseases.*

Owing to the enormous increase of skin diseases produced by the handling of, or working with, substances irritating for the skin, the Krankenkassen of Austria have been of late forced to disburse large sums as sick pay to their members on this account. The skin specialists of the two most important of these sick clubs, therefore, brought the matter before the Vienna Gesellschaft der Aerzte, and after some discussion it was decided to institute an inquiry into the existing conditions. The inquiry will be conducted by the Dermatological Society of Vienna, and the Ministry of the Interior will be represented by the officials from the factory inspectors' department. The prophylactic measures will have to aim at lessening the direct danger caused by the work, and the cost of them would no doubt be less than the present sick pay amounts to. Occupational diseases have only lately received much attention, and as the whole subject is an important one the inquiry is looked forward to with considerable interest.

*Schools for Nurses in Austria.*

The defects of our system of training nurses have been made manifest during the experiences

of the late war, and recognising the requirements of modern times the Government at once set to work to correct this serious shortcoming. The outcome was the establishment of schools for training qualified nurses, such having been opened now in Vienna and in four other important towns of the empire. The Red Cross Society of Austria has also made arrangements for a training school for nurses, so that within a couple of months an ample number of important institutions will be in working order. Nursing has hitherto been regarded here as a somewhat undignified occupation, and in order to induce a better class of women to offer their services the entrance requirements will be raised. The nuns, who in many hospitals serve at present as nurses, will be gradually replaced by trained nurses.

Nov. 28th.

# Obituary.

## EDWIN KLEBS,

LATE PROFESSOR OF PATHOLOGY AT WÜRZBURG, PRAGUE, AND ZÜRICH.

WITH the death of Edwin Klebs, the veteran pathologist and bacteriologist (at his home in Bern, Oct. 23rd), medicine loses one of the last representatives of a great historical period and a persistent early advocate of the theory of contagium vivum.

A native of Königsberg and a cousin of von Leyden, Klebs followed Virchow's lectures at Würzburg and became his assistant at Berlin in 1861. Called first to a professorship at Bern (1866), his academic career was that of a peripatetic. He held in succession the chairs of Pathology at Würzburg (1872), Prague (1873), Zürich (1882), and during his period of retirement resided variously at Carlsruhe, Chicago, Hanover, Berlin, and Lausanne. Klebs had a restless, changeable activity, passing from one place to another, an ancestral Slavic trait which had much to do with the character of his work and the effect it produced upon his contemporaries. His "Handbook on Pathological Anatomy" (1869–76) and his larger "Allgemeine Pathologie" (1887–89) are highly esteemed by the masters of this science as solid, thorough works of enduring value, containing many original facts which have become part and parcel of current knowledge. In his career he had many able pupils, particularly E. Ziegler, Zahn, Eppinger, Soyka, Fischl, von Jaksch, Lubarsch, also several Englishmen, Americans, Italians, Slavs, and Japanese. He will be best remembered in the future as a path-breaker and a precursor.

Klebs's name is permanently associated with the discovery of the diphtheria (Klebs-Löffler) bacillus, which he was the first to see and to recognise as the cause of the disease (1883), while Löffler tried the organism out by Koch's postulates and dissociated it from the bovine and avian varieties (1884). Not only did he see the typhoid bacillus before Eberth (1881), but he antedated Koch by seven years in the bacteriological investigation of the traumatic infections (1871), and also made solid cultures before him. His work undoubtedly set Koch in the right direction, as the latter has sometimes acknowledged. If anyone will examine Klebs's experimental study of the contagion of syphilis (1878), he will see most interesting coloured plates showing experimental inoculations of monkeys, 15 years before Metchnikoff's, and figurations of parasites which he firmly believed to be the cause of lues. Klebs was the first to investigate the bacteriology of gunshot wounds (Franco-Prussian war, 1870–71), made the initial experiment in producing endocarditis by mechanical means combined with general infection (1876), first produced tuberculous lesions in animals by feeding them with "Perlsucht" milk, independent of Gerlach's experiments (1873), and in 1900 he attempted to treat tuberculosis with the bacilli of cold-blooded animals, the species selected being the slow-worm bacillus (Blindschleichenbacillus).

It may be asked why the work of so brilliant an investigator is so little known in detail, except among the specialists in his field of activity. The answer is that, except in pathological morphology, he completed no phase of it, leaving that accomplishment for others, to Koch's school in particular. That Klebs has not always followed up his victories to their ultimate consequences finds explanation in certain peculiar circumstances of his time and principally in his personality. His restless temperament made him pay the usual penalties of the thinker who is in advance of his time. This is strikingly shown in his monograph on gigantism (1884), which, but for a single fact, would have long been known as an epoch-marking document in the history of acromegaly and the pituitary body. Only a veteran pathologist of the first rank could have drawn up this protocol. As it is, Pierre Marie's essay, although published two years later and not nearly so complete as that of Klebs, is regarded as the classical monograph on acromegaly. Similarly in his investigations of malarial fever (with Tommasi-Crudeli, 1879), Klebs wrongly inferred the "bacillus malariæ," yet his work was translated and published by the Sydenham Society and for an excellent reason —namely, that it was clearly in the right direction. Indeed, Klebs will always be recognised in medical history as having done most to get pathologists away from the solidist views of Virchow by emphasising the fact that post-mortem findings, after all, are only end results, and that the true causation of infectious diseases is to be sought in parasitic agents coming from the outside world. In bringing the weak-kneed over to this view his propagandism was of the broadest and most impersonal character. His two discourses on the trend of pathology, published in 1878 and 1882, are definitely contra-Virchow, yet nothing could be more courteous and reasonable than the attitude he takes in joining issue with his old teacher and friend. It is true that he sometimes assigned a rôle to micro-organisms which is not yet justified—for instance, in his monograph on endemic cretinism in Austria (1877), but the general effect of his work was strongly to reinforce the position taken by Pasteur and his followers. It is said that even to the last Klebs lived with his gaze fastened on the future, particularly in regard to the problem of tuberculosis which occupied his declining years; yet he had a fine historical perspective, and his little discourse on medical history, delivered at Bern in 1868, is a survey of the subject which for definite assignment of values and attractive presentation might be compared with the charming primer of Stopford Brooke on English literature. In the preface Klebs quotes Schiller's distich to the effect that where impotence and incompetence sit with folded hands and consider the rules of the game the strong man works wonders by simply "starting something"—

> So war's immer, mein Freund, und so wird's bleiben :
> die Ohnmacht
> Hat die Regel für sich, aber die Kraft den Erfolg.

This is the keynote of his character. A broad-browed, broad-minded savant of the Prussian type,

it was part of his temperament to fling himself into many an imminent breach and to break many a pathway, leaving it to others to follow up and complete what he had started. As a *Bahnbrecher* he will always be remembered, not only for his own discoveries, but in connexion with those of other men whom he started in the right direction.

Wer für die Besten seiner Zeit gelebt
Der hat gelebt für alle Zeiten.

FIELDING H. GARRISON.

## CLEMENT GODSON, M.D. ABERD., M.R.C.P. LOND., M.R.C.S. ENG.,

CONSULTING PHYSICIAN TO THE CITY OF LONDON LYING-IN HOSPITAL.

THE regretted death of Dr. Clement Godson took place, as announced in our last issue, in London on Nov. 26th.

He was born on June 4th, 1845, and was the eldest surviving son of the late Mr. Charles Godson, F.R.C.S. Having received his preliminary education at King's College School, he afterwards entered at St. Bartholomew's Hospital, and later continued his medical studies at Aberdeen University. In 1868 he qualified by taking the Membership of the Royal College of Surgeons of England, and in 1872 graduated M.B. C.M. at Aberdeen, proceeding to the M.D. degree two years later, when he also obtained the Membership of the Royal College of Physicians of London. Shortly after receiving his degree in medicine and surgery, Dr. Godson was elected first assistant physician-accoucheur at St. Bartholomew's Hospital, a newly created office, and this position he occupied for some 16 years, resigning it only on the death of his senior colleague, Dr. Matthews Duncan. Among other important positions which he had filled were those of physician to the City of London Lying-in Hospital and examiner in obstetrics at Aberdeen and Durham Universities. He was also president of the British Gynæcological Society, Fellow and vice-president of the Obstetric and Gynæcological Section of the Royal Society of Medicine, Fellow of the Medical Society of London, consulting physician to St. Peter's Home, Kilburn, physician to the Samaritan Free Hospital for Women and Children, and consulting physician-accoucheur to St. George's and St. James's Dispensary. In 1896 he was appointed honorary president of the Congress of Obstetrics at Geneva, and was for many years a corresponding member of the Italian Obstetrical and Gynæcological Society. Dr. Godson was actively interested in the work of the League of Mercy, of which league he was a vice-president. As an ardent supporter of the Volunteer movement and as a member of that force he received the Volunteer Decoration, and on the inauguration of the Territorial Force he was appointed Colonel of the Royal Army Medical Corps (T.F.), and became officer commanding the 2nd London (City of London) General Hospital. To the literature of his profession Dr. Godson contributed papers on medicine, surgery, and obstetrics, and was the author of the article, among others from his pen, upon puerperal diseases in "Quain's Dictionary of Medicine." He was a prominent Freemason.

Dr. Godson was an extremely able practitioner in his special line, and enjoyed the esteem of a large circle of colleagues, friends, and patients. By his marriage with Alice, the second daughter of the late Rev. Robert Briscoe Tritton, rector of Bognor, he had four sons and four daughters.

# Correspondence.

"Audi alteram partem."

## THE UNIVERSITY OF LONDON.

*To the Editor of* THE LANCET.

SIR,—The Faculty of Medicine of the University of London this afternoon passed a number of resolutions endorsing the action of their Board of the Faculty. The question of the constitution of the Faculty which will result from the recommendations of the recent Royal Commission did not come under consideration, and we are promised another report from the Board on this subject before Christmas. As I believe this question to be of primary importance to all the schools of medicine as well as to the University, and as I am convinced the members of the present Faculty of Medicine are living in a fool's paradise if they think they can blissfully ignore the Commission and all its works, I shall be grateful if you will allow me to put some matters before my fellow members of the Faculty which I think they may not have thought out fully. The references *re* pages and sections are to the Final Report of the Royal Commission on University Education in London (Bluebook C. d. 6717, price 2*s*.).

The term "schools" means throughout those teaching bodies which elect to qualify as schools of the University, but do not or cannot elect to become constituent colleges. The latter term is restricted to the use made of it by the Commissioners—namely, to indicate those teaching bodies which elect "to transfer all educational and financial control of their affairs to the University" (Section 119). In medicine there "cannot be more than three such colleges," but the full scheme will come into force when one such college has been established (Section 298). The list of schools contemplated in the Faculty of Medicine is given on p. 204, and includes all the present teaching schools, but these will have to appoint University representatives chosen by the Academic Council on their governing bodies, and generally submit to a far larger degree of University control than any to which they have been hitherto accustomed. The measure of control contemplated by the Report can be gauged from the following statements:—

> "The University must be satisfied that there is no adequate and suitable provision of university instruction already existing in the locality concerned for the particular class of students whom it is proposed to teach, and it must have the power to require the coördination of the work of the centre with the work existing elsewhere as a condition of its continued status as a school." (p. 203.)

Thus it is evident that the University may bring pressure to bear upon certain of the present schools to forego some of their courses of study and thus seriously interfere with their internal government.

> "In the case of a hospital medical school ..... the governing body of the hospital will appoint a committee of its own members, with the addition of University representatives, to conduct the business of the school, and will always invite and receive a report from that committee before deciding any matter affecting that department of the institution." (p. 203.)

"Even in the case of teachers not appointed by the University, and for whom no University title is desired, the Senate will have some voice in the appointment—e.g., by representation on the appointing committee." (p. 203.)

The Faculty of Medicine as it at present exists is to be abolished, and no other faculty will be constituted until the establishment of the constituent college or colleges. Until the new faculty is so constituted the new "Board of Studies in Medicine" will form the unit of government of the schools, and this board will report directly to the Senate (Section 385). When the new faculty comes into existence the Board will not have the right of direct access to the Senate, but will have to report to the Faculty.

The constitution which the report proposes for the schools, not being constituent colleges, is as follows. The Board of Studies in Medicine shall form a committee of itself, subject to the approval of the Senate, to prepare curricula and syllabuses, &c. (Section 385). This committee shall report to the parent Board of Studies; the Board of Studies shall in turn report to the Faculty of Medicine, which when constituted shall consist of the "University Professors and other Teachers of standing in the University Medical Colleges which would be Constituent Colleges." "Some eminent members of the profession who were not teachers in these colleges" might be coöpted, but this right "should be sparingly exercised," and need not be exercised at all (Section 305).

The powers of the Faculty thus constituted are detailed on page 53. It shall have the power generally "to determine the conditions for the award of degrees, diplomas, and the course of study to be pursued by students of the University within the Faculty." The Faculty will report to the Academic Council, which will consist of the deans of the faculties and eight other members of the faculties, elected in common session. The Vice-Chancellor is *ex-officio* chairman; with this exception all the members will, we may be sure, be members of the constituent colleges. The Academic Council will have large executive powers in educational matters, including the recognition and visitation and university control of schools.

The Academic Council reports to the Senate, on which it has two representatives out of 15 members. The Senate transmits its instructions to the schools through a special committee to be appointed by the Senate (Section 400). This committee is "to supervise curricula and general examinations in the schools," but "it is not to be constituted so as to represent institutions or particular classes of students." This committee, which I shall call for short the "Scholastic Council," though it is not given any distinguishing name in the report, is comparable to the Academic Council in that in those branches of study in which there are no faculties this committee receives reports which if there were a faculty would be transmitted to the Academic Council. The Scholastic Council might very well be strengthened so as to perform for the schools the functions which the Academic Council peforms for the constituent colleges. The Scholastic Council communicates its findings to the Board of Studies which I have called the "unit of government of the Schools." (It must be carefully borne in mind that the meaning given by the Report to the term "Board of Studies" differs from the meaning which that term has had in the past.)

The constitution of all the bodies concerned makes the procedure very inconvenient and unfair for the schools, as compared with the procedure which is to be adopted for the constituent colleges.

The Board of Studies (Section 385) is to consist of the "principal teachers in the schools of the University"; it is therefore entirely comparable to the constitution of the new faculty, which will consist of the professors, readers, and some coöpted teachers of the constituent colleges; but whereas the Faculty, consisting of teachers at the constituent colleges, reports direct to the Academic Council, also consisting of teachers at the same colleges, the Board of Studies reports direct to the Faculty—*that is, to a body of persons with a direct financial and personal interest in hastening the transfer of all students for Oxford, Cambridge, or London degrees from the schools to the constituent colleges.*

As the statement which I have italicised has been questioned perhaps I may be allowed to substantiate it. It must be remembered that the Commissioners allowed the professor a limited amount of private practice, but they did not mention the means by which limitation could be enforced. In many branches of medicine it is obviously impossible to fix the hours during which the professor may respond to the calls of his patients. A man with appendicitis, a woman in labour, a child with a doubtful diphtheritic throat cannot await the convenience of the surgeon, the obstetrician, and the physician respectively. Limitation could in fact not be enforced, and this consideration influenced the Board of the Faculty in the unanimous vote which they recorded that the professor should not be allowed any practice at all. But the Commission's recommendation holds the field, and while it does so it is obvious that it is to the professor's pecuniary interest to attract as many students as possible to his classes. The prestige of the college and of its teachers will to a large extent depend on the number of students which attend it.

As the Dean of the Faculty of Medicine very pertinently observed, the Commissioners make a division where no division existed before. University students studying at the colleges are to be sharply differentiated from university students studying at the schools; they are to be branded as separate even after they have graduated; for graduates are required to add to their degree the name of the college or school at which they studied. The cumbrous and absurd titles which will result from this regulation do not seem to have touched any sense of humour in the Commissioners. We may see, on death certificates and other documents, signatures such as "John Smith, M.D. Lond. University College Hospital Medical School"; or in the case of a woman graduate a still more clumsy appellation—e.g., "Mary Jones, M.D. Lond. The London (R.F.H.) School of Medicine for Women."

But the dualism which the Commissioners introduce is not even a fair dualism, for the dice are heavily loaded in favour of the constituent college and against the school. I have shown how the constitution favours the college. But another most important privilege is reserved for teachers in the colleges and is not accorded to teachers in the schools, in that the teachers at the college examine their own students but this is not the case with teachers at the schools. For example, if three colleges, A, B, C, are constituted, the examinations are differentiated at A, B, and C respectively. But if X, Y, Z are schools of the university the same examination must be taken by each of these

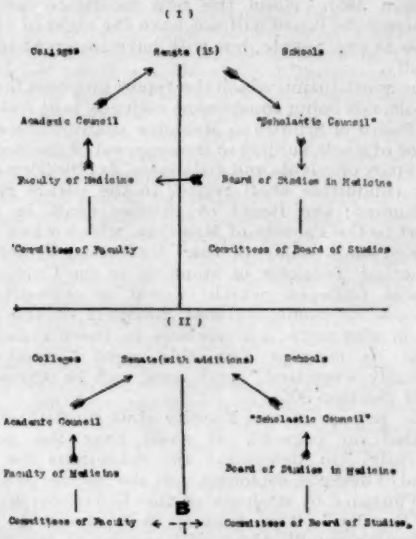
individual schools—that is, the teachers will not examine their own students. Moreover, the examination held at the schools will be controlled by the Faculty and the Academic Council—i.e., by the teachers at the constituent colleges.

The President of the Board of Education has clearly indicated that when a Bill has been submitted by the Departmental Committee at present sitting, the Bill will be made a Government measure, and will presumably be backed by the present Coalition majority. It may then be asked: "What is the use of kicking against the pricks?" and it may be questioned whether the present Faculty of Medicine can do anything to save the situation. I believe that it can, but not without combination with other faculties and not without exerting itself to the utmost.

There is a proposal now being discussed in other faculties, and notably in the Faculties of Arts and Science, by which, if the Report of the Commission is pushed, certain modifications may be obtained which will remedy to some degree the more glaring injustices of the changes recommended by the Report. My chief purpose in writing this letter is to lay before your readers the modification suggested. To put it as briefly as possible, the present Medical Faculty is urged to demand that the privilege of reporting direct to the Senate through the special committee to be appointed by that body, which I have called the "Scholastic Council," shall be retained permanently, and shall not be given up, as the Report suggests, when the new Faculty of Medicine comes to be constituted.

The effect of this modification will best be understood by reference to the diagram. Scheme I. represents the proposal of the Commissioners, which will come into operation as soon as a constituent college, and thereby the new Faculty, comes into being. By this scheme any report from the Board of Studies must be submitted to the Faculty, and this report follows the course indicated by the arrows in the diagram until the instructions of the Senate come back to the Board of Studies *vid* the "Scholastic Council." As the "control of the teaching and examining work of the University should as far as possible rest with the faculties" and "only the control of finance and administration business rest with the Senate" it is obvious that in most cases affecting the schools the Senate will do little more than transmit the judgments passed by the Faculty and Academic Council. It is surely unjust to require that "the principal teachers in the Schools" shall have to submit in all their arrangements for teaching and examining their own students to revision by a body of competing teachers of no higher status than themselves, but who happen to be teachers in a constituent college. The scheme marked II. represents on the side marked schools the procedure which the Commission recommends as provisional until the new Faculty is established. By this scheme the schools have direct access to the Senate *vid* the "Scholastic Council," and the proposal to which I am inviting the attention of the present Faculty is that when the constituent college and the new Faculty make their appearance the affairs of the constituent college shall be managed by the Faculty and Academic Council (subject to the final authority of the Senate), and the affairs of the schools shall be managed by the Board of Studies and the Scholastic Council, which should be strengthened by representation from the schools in the same measure as the colleges are represented on the Academic Council. The Scholastic Council will be to the same degree under the authority of the Senate, and this Council should have the same representation on the Senate as the Report concedes to the Academic Council. The subordination of the schools to the colleges which is contemplated in the Report thus disappears. If it is thought advisable to have contact between the schools and colleges, this might be arranged by the common session of the committees of the Faculty and of the Board of Studies (indicated in the diagram by the double pointed arrow B). This would mean an inter-

DIAGRAMS.




change of views on an equal basis, and the common outlook thus obtained would usefully leaven both the parent bodies to which these committees report. If it be objected—and the objection has been made—that this is to separate the colleges and the schools into watertight compartments, the answer is that the Commission has so decreed it—"Tu l'as voulu, Georges Dandin"—and it is useless to attempt to override their Report. All that can be done, if, indeed, that little is possible, is to correct the most obvious inequalities; and I repeat that it is only by concerted action by as many faculties as may be practicable that even this may be achieved.

I am, Sir, yours faithfully,

E. GRAHAM LITTLE,
Member of the Senate of the University of London; Member of the Board of the Faculty of Medicine.

Wimpole-street, W., Dec 1st, 1913.

## THE PATHOLOGY OF YELLOW FEVER.

*To the Editor of* THE LANCET.

SIR,—I would like to bring to your notice the results of some investigations by Dr. J. W. Scott Macfie and myself at the Medical Research Institute, Lagos, during a small outbreak of yellow fever that commenced in May of this year. We had the opportunity of examining very many blood films from infected patients and of carrying out experimental inoculation of animals.

In the course of our observations we discovered in the red cells small parasitic bodies which proved to be identical with the paraplasma flavigenum described by Seidelin in Vol I. of the "Yellow Fever Bureau Bulletin." These proved, on further experience, to be fairly numerous in the blood; moreover,

we found them in practically every definite case of yellow fever that we examined, and we are confident that they are of very great service in the correct diagnosis of the disease. The paraplasma bodies were found to be present for several days—in one case for 12—and we succeeded in infecting guinea-pigs as late as the eighth day, facts that would tend to invalidate the usually ascribed period of infectivity of three days.

In our animal experiments we were most successful with guinea-pigs, though we also succeeded in infecting dogs and white rats—the latter specially imported from England—and we also infected guinea-pigs on subinoculation. As a result of inoculation the animals showed paraplasma flavigenum in the blood, and in the case of most of the guinea-pigs a very definite rise of temperature of 1·5° to 2° or more, lasting for several days. The white rats showed a modified reaction of shorter duration, the dogs no febrile rise whatever, though most of the dogs showed paraplasma in their blood. We also examined several stray dogs brought to us, and in two of them we found very similar bodies—a point that may prove to be of importance in the spread of the disease. The blood of several fowls proved to be entirely negative.

These results, as tending to a more rapid and more certain diagnosis, increase in importance when one considers the very fatal nature of the disease when attacking Europeans and the great natural difficulties met with in dealing effectively with an outbreak in a country such as Southern Nigeria.

I am, Sir, yours faithfully,

J. E. L. JOHNSTON,

Bude, Cornwall, Nov. 30th, 1913. West African Medical Staff.

## THE GOVERNMENT OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

*To the Editor of* THE LANCET.

SIR,—As honorary secretary of the Society of Members of the Royal College of Surgeons of England, which society was responsible for preparing and issuing the letter to which Mr. Brudenell Carter refers in your issue of Nov. 22nd, I feel sure that, in view of your journal's motto, "Audi alteram partem," you will allow me to answer his would-be searching criticism.

The letter accurately described the condition of Mr. Carter as *a Member* and not as a Fellow; to him as a Member the letter was sent. Mr. Carter is probably unaware that by Clause 6 of the charter of 1843, which filched from the Members some of their ancient rights, every Fellow must also be a Member of the College. It is only inasmuch as he is a Member that Mr. Carter has any legal interest in the property of the College, which (by ancient charter) is vested in the Members only.

We must, as Sir Rickman Godlee says in THE LANCET of Nov. 22nd (p. 1444, col. 2, line 8), "emancipate ourselves from the superstitions and traditions of our elders." He also says on p. 1447 that the examinations the would-be M.R.C.S. has to pass are recognised as being "models of fairness and thoroughness, and are specially distinguished by their practical character," and might be the pattern for State examinations in a single portal system.

The last statement of Mr. Carter's letter is not only insolent but untrue, as we are all aware that lack of money on the part of a student or his parents to pay for the extended time of study required has often been the only impediment to a youth of ability taking his Fellowship shortly after his becoming a Member of the College.

In the recent congratulatory address from the English to the American College of Surgeons it is stated: "We cannot forget the important advances in the science and art of surgery achieved by many distinguished surgeons in the continent of America during the past"; and these advances have not been achieved by Fellows of the Royal College of Surgeons of England.

My society does not propose, as your correspondent alleges, to transfer the government of the College from the Fellows to the Members, but it only asks for a small number of persons elected by the Members to be joined to the present Council of 24 Fellows; the Members might elect as their direct representatives other Fellows who are worthy of their confidence.

The charter of 1800, which constituted the College of Surgeons in its original form, stated that "the establishment of a College of Surgeons will be expedient for the due promotion and encouragement of the study and practice of the art and science of surgery"—i.e., as a whole and not specially for the encouragement of major operations at the hands of Fellows. Indeed, it did not sanction the creation of Fellows at all, but it was left to the charter of 1843 to permit the wholesale translation of 542 Members into Fellows without any qualifying examinations whatever.

The objects of the Society of Members are—

(A) To arouse and maintain among Members of the R.C.S. Eng. a permanent interest in their College, by obtaining for them a share in its management.

(B) To promote an amendment of the charters of the College which shall permit the Members to take part in the election of the governing body.

(C) While seeking primarily to further the interests of Members, to coöperate with the Fellows in obtaining such reforms as are possible under the present charters.

(D) Generally to promote the true welfare of the corporation by bringing the Council, Fellows, and Members into harmonious action.

All sensible persons will admit that these principles contain nothing the acceptance of which is derogatory to the dignity of the College or inimical to the interests of the Fellows. Therefore many Fellows subscribe annually to the funds of the society, and at the annual meeting in Lincoln's Inn Fields, progressive and distinguished Fellows speak and vote in favour of the direct representation of Members on the Council. In or about 1903, at a meeting exclusively composed of Fellows, this resolution was passed by an overwhelming majority: "That it is desirable to give Members a direct representation on the Council."

Finally, I would remind Mr. Carter of the admonition (centuries old) of Sir Thomas Vicary, first Master of the Barber-Surgeons' Company: "Despise no other chirurgeon without a great cause; for it is meete that one chirurgeon should love another, as Christ loveth us all."

I am, Sir, yours faithfully,

SIDNEY C. LAWRENCE.

22, Latymer-road, Lower Edmonton, N., Dec. 1st, 1913.

*To the Editor of* THE LANCET.

SIR,—Mr. R. Brudenell Carter's suggestion in THE LANCET of Nov. 22nd that the claim of Members to a voice in the governance of their own College, of which they are by law an actual part of the body corporate, would if granted be highly prejudicial, shows, I submit, a peculiar trend of mind

inconsistent with modern thought. His implication that Members are not interested in the advancement of higher surgery is groundless.

As regards the financial aspect of the question, the hard fact remains that the dignity and the existence of the College depend upon the contributions of the Members. The mere possession of a surgical diploma with honours does not confer administrative and executive ability.

It is incomprehensible that a charter to-day would be granted by the King in Council excluding the Members from the governance of their own College (cf. the charters to the new universities). Self-government is the modern doctrine which in the domain of politics has been won by a series of constitutional conflicts; had it not been so we should still be living in the Middle Ages.

I submit that healthy criticism and coöperation of Members would lead to the advancement and well-being of the College, as the coöperation and criticism of the Commons in the great council of the realm has led to good government in this country.

Mr. Carter's letter unknowingly supports the claims of Members, for none can read it without being impressed with its prejudice, which, if typical of the mental attitude of the Council and Fellows, requires to be diluted with more modern and up-to-date views.

I am, Sir, yours faithfully,

FREDERICK W. COLLINGWOOD.

Primrose Club, Nov. 28th, 1913.

## THE NATIONAL INSURANCE ACT: THE SIGNING OF CERTIFICATES.

*To the Editor of* THE LANCET.

SIR,—On Nov. 27th a case of considerable importance was tried in the City of London Court. It was essentially a case of panel doctor *versus* Friendly Society, and I, the cause thereof, would like to lay the facts before your readers. For years I have been in the habit of signing certificates, prescriptions, &c., by means of a facsimile rubber stamp, and such a practice became much more convenient with the advent of the Insurance Act, where prescription forms have to be signed in duplicate, and large numbers of certificates have to be signed every week. I may add that signing one's name in this manner is a perfectly proper and legal proceeding, and any document whatsoever—death certificates, wills, contracts, and affidavits—may be so signed. No exception was ever taken to my facsimile stamp by any society or person until a month or so ago, when the Prudential Society, after accepting several certificates attesting the sickness of one of their members, a patient of mine, suddenly, without any official notification, refused to accept any more of them, their agent giving as a reason that the certificate was not properly signed.

I represented to the society that my stamped certificate was valid and must be accepted by them. I even called on the secretary and informed him that the signature was mine. Being a barrister, he favoured me with a good deal of legal information, which has subsequently been proved to be incorrect. Week by week, meanwhile, Mrs. Kipps presented her certificates and the society continued to refuse payment. They made representations to the Insurance Commissioners, with the result that a letter was sent to me requesting me to discontinue using my rubber stamp, the writer signing the letter with one himself!

Mrs. Kipps, through a solicitor, now issued a writ against the Prudential Society, and the case came before Judge Rentoul, K.C. The solicitor to the society urged that the court had no jurisdiction in that the rules of the society provided for settlement of all disputes by arbitration. Mr. Knight, barrister, pointed out that by the society's rules the arbitrator was to be appointed *by the society*, and that a sweep might easily be the person asked to adjudicate. The Prudential solicitor admitted this, but added the proviso that the sweep should be honest.

The judge held that the court had jurisdiction, and found for the plaintiff, with costs on the B scale. The society's solicitor thereupon asked leave to appeal and the judge granted it, adding a warning to him to look up his law carefully before advising his society to spend large sums of money in the Appeal Court.

A stamped signature, therefore, has again been held to be valid, and all persons concerned are bound to accept it. One of the Prudential objections was that they had no means of knowing whether it was the doctor's signature or not, but the judge pointed out that in any case they could not possibly know whether the written signature was genuine or not. He added: "I think, of the two, the rubber stamp is safer, for that can be kept under lock and key, whereas anyone can *write* the doctor's name."

In conclusion, I may point out that the society never once refused a stamped certificate stating that a member was able to return to work. To busy practitioners the convenience of using a stamp for signatures is very great, they are legal and valid, and those doctors who have been intimidated with regard to their use, may take heart of grace and sign anything they like with a facsimile stamp and no one may say them nay.

I am, Sir, yours faithfully,

London, S.E., Nov. 30th, 1913. C. H. PRING.

*** A reference to this case will be found in another column (p. 1668).—ED. L.

## THE MOUNT VERNON HOSPITAL.

*To the Editor of* THE LANCET.

SIR,—In reply to the letter of Mr. Charles Johnston, chairman of the committee of management of the Mount Vernon Hospital, in your issue of Nov. 22nd, we wish to refer mainly to the causes of the resignation of the whole of the consulting staff and the large majority of the acting staff, a statement of which appeared in your issue of July 12th, 1913.

At the expense of chronological order, but to clear the ground, we notice that with regard to one of the causes of the resignation there is no essential difference between us and the chairman. The fact is that after what must seem to most an arbitrary action on the part of the committee of management, the chairman of the committee refused to meet the medical board in conference. Whether the proposed action of the committee of management with regard to the Northwood appointments was justifiable or not, it was pointed out in an unmistakable manner that the medical board disagreed with it, and that it might be fraught with serious consequences to the hospital. In view of this we must maintain that the refusal on the part of the committee of management to discuss with their honorary medical staff so important a matter as the Northwood appointments, not only justified,

but, even alone, practically necessitated the resignation of the staff.

We now turn to the matter which, as we were legally advised, could only be described as the summary dismissal of two members of the medical staff from their appointments at Northwood. At the risk of unduly encroaching on your space, we venture to give as shortly as possible an account of the origin and development of this procedure. Towards the end of 1909 it was decided by the medical board, consisting of all the members of the honorary medical staff, that all the honorary visiting physicians to the hospital should have the rank of full physician and should be given charge of beds at either the Hampstead or Northwood Institution. The two junior physicians, Dr. F. W. Price and Dr. A. J. Whiting, the only members of the staff who were then without beds at either institution, were allotted 20 beds each at Northwood, the remaining beds there (60 in number) being under the care of two of the senior physicians—viz., Dr. J. E. Squire and Dr. G. F. Johnston. This arrangement was referred by the medical board to the committee of management for their approval, which they gave and confirmed subsequently in letters to Dr. Price and Dr. Whiting, dated Nov. 17th, 1909. In these letters the above physicians were informed that they were elected visiting physicians to the hospital at Northwood for a period of 12 months. Although these appointments were originally intended to be renewed from year to year, formal renewal of them was allowed to lapse by the committee of management, so that as a fact no further communication was received, either by the medical board or the physicians in question, from the committee of management concerning these appointments until the letters hereinafter to be referred to were sent to Dr. Price and Dr. Whiting on April 17th, 1913.

From about the middle of 1911, during the whole of 1912, and during the earlier months of 1913 considerable difference of opinion occurred between the committee of management and the medical board concerning the management of the hospital, and especially with regard to the proposal to sell the hospital at Hampstead and devote the funds to the maintenance of the sanatorium at Northwood. In this controversy the whole of the staff were united in condemning the policy of the committee of management, and all of them signed a memorandum, dated December, 1911, to this effect. Certain members of the staff representing their colleagues voiced the opinion of the medical board, more especially Dr. Tunnicliffe, Dr. Price, and Dr. Whiting.

At an adjourned meeting of the committee of management held on March 19th, 1913, one week after the meeting of the governors at which it was decided to sell the hospital at Hampstead, and at which Dr. Tunnicliffe and Dr. Whiting had both made speeches strongly condemnatory of the policy of the committee of management, the following motion was brought forward by the chairman that—

> A change of physicians is desired at Northwood and that the posts be offered to Dr. Johnston, Dr. Kelynack, and Dr. Lister.

It was only after the strongest protest from the representative of the staff present that this motion was referred to the medical board, the chairman at the same time giving notice that he should bring it forward at the next meeting. The motion was carefully considered by the medical board at their meeting on April 1st, 1913, and it was pointed out that the appointments at Northwood were annual ones that Dr. Whiting and Dr. Price were appointed in November, and therefore their appointments could not be justly terminated in April without notice. Attention was also drawn to the fact that the motion was in itself inconsistent in so far as, although a desire was expressed to have other physicians, its proposer purposed retaining Dr. Johnston, who had been visiting physician to Northwood institution for over four years. As a result of the discussion the following resolution was proposed, seconded, and unanimously carried:—

> That for a year, or until such time as the hospital at Hampstead be sold (provided that this take place before April 10th, 1914), the present physicians continue to attend at Northwood; but that in the case of the Hampstead hospital being sold the duties of the present medical staff of the hospital, with regard to Northwood, be considered *de novo*.

At the following meeting of the committee of management on April 16th the chairman moved his resolution, viz.:—

> That Dr. G. F. Johnston, Dr. T. N. Kelynack, and Dr. T. D. Lister be appointed visiting physicians at Northwood.

And in spite of the resolution of the medical board and the protest of the representatives of the staff, who recited the arguments that had been used at the meeting of the medical board, this resolution was carried *nem. con.*

The next step taken by the committee of management was the despatch on April 17th of letters to Dr. Price and Dr. Whiting, informing them of the new appointments at Northwood and saying to each: "Your appointment as a visiting physician at that hospital now terminates."

On the receipt of this letter the physicians in question consulted their colleagues and their lawyers and the whole matter was again discussed at the meeting of the medical board on May 6th. As a result of these consultations Dr. Price and Dr. Whiting wrote to the secretary of the hospital informing him that they could not accept these letters as valid notice of the termination of their appointments at Northwood and in accordance with legal advice they continued to attend as physicians to that institution. Their letters and action elicited three letters from the committee of management, one each to Dr. Price and Dr. Whiting, acknowledging their letters of protest and enclosing the following extract from the minutes of the meeting of the committee held on April 16th.

> The period for which the present physicians to the Northwood Hospital were appointed having expired, the Chairman moved, in accordance with notice, that Dr. Johnston, Dr. Kelynack, and Dr. Lister be elected visiting physicians to the hospital at Northwood for a period of 12 months from this date.

The third letter was written by the chairman of the committee of management to the resident medical superintendent at Northwood, informing him of the election of Dr. Johnston, Dr. Kelynack, and Dr. Lister as visiting physicians to Northwood for the present year and the termination of the appointments of Dr. Price and Dr. Whiting, and concluding:—

> I must ask you not to allow any physician to treat the patients except the three above named. I understand you have distributed all the patients between them.

The medical board at their meeting on May 6th, after considering carefully these letters and the action of the committee of management since their last meeting, felt that the best way of dealing with

the difficulty was by moving the following resolution, which was unanimously carried:—

The medical board have learned with profound regret that the committee of management have seen fit to disregard the recommendation of the board concerning the appointment of the visiting physicians to Northwood. The committee of management will understand that their action places the medical board in a very difficult position, and that if it indicates a definite policy on the part of the committee it is useless for the medical board to tender their advice on medical questions in the future. The medical board hope that this is not the intention of the committee of management, but they consider that the question at issue affects the interest of the hospital in so vital a manner that they recommend that a joint meeting of the committee of management and the medical board shall be held at the earliest possible date for the purpose of discussing the above question, and in this way enabling the medical staff to come to a decision as to their future course of action.

In reply to this request the honorary secretary of the medical board received the following letter, dated May 20th, 1913, from the secretary of the hospital:—

In reply to your letter below is an extract from the proceedings of the general committee at their meeting on the 14th inst.: "Mr. Lawrence moved that this committee regrets that it cannot accede to the request of the medical board for a joint conference. Mr. Attlee seconded. Carried unanimously."

This concludes the history of what took place between the medical board and the committee of management up to the resignation of the majority of the staff on July 20th, 1913, and includes the official causes of this resignation, as stated in your issue of July 12th, 1913. As a fact, however, at the meetings of the medical board on April 1st and May 6th, when the action of the committee of management with regard to the appointments at Northwood was being discussed, it was pointed out that, since Hampstead was admittedly to be sold, Northwood would be the only institution containing beds available for allotment amongst the staff. Under these circumstances it was felt that if it became necessary to alter the arrangement sanctioned by the committee of management in 1909—viz., that all the physicians should have beds under their care—the physicians of the staff should be invited to take charge of the available beds in the order of seniority. In other words, that the committee should have officially offered beds at Northwood to the senior physician, Dr. Tunnicliffe. It was the intention of the medical board to discuss this matter fully at the conference, and to point out that by the by-laws the committee of management were bound to refer all medical matters, which clearly includes the duties of the staff, to the medical board before deciding the same, and that in the case of medical appointments the only proper way of doing this was the one established by almost universal precedent—viz., that of asking the medical board to nominate to staff appointments.

In the preceding paragraphs of this statement the communications between the committee of management and the medical board up to the resignation of the latter have been considered. In a correspondence in the *Times* elicited by the resignation of the staff certain new points in defence of the action of the committee of management were advanced by the chairman, particularly, that in making the new appointments at Northwood the committee were acting in accordance with the seniority of the members of the staff. We at once pointed out that no beds at Northwood had been offered to the senior physician. The chairman has replied that Dr. Tunnicliffe's name was actually proposed and withdrawn at Dr. Tunnicliffe's request. We must here state, as we did in the *Times*, quite definitely, that no such proposal, and hence no such withdrawal, ever took place. We must again challenge the chairman, as we did three months ago, to produce any minute or any written communication of any kind confirming this statement. We must point out that since Northwood was, or would soon become, the only institution containing in-patients, a refusal to accept the charge of beds there practically amounted to resignation from the hospital staff. Are we then to believe that such a refusal at a meeting of the committee of management was not deemed worthy of a minute?

Our excuse for trespassing on your space at this length is that, having already mentioned in our letter of resignation the holding of an inquiry into the management of the hospital, we do not wish to continue this correspondence; we venture, however, to submit, and we feel sure that most of our professional brethren will agree, not only that our resignation was an inevitable sequence of the summary dismissal of the junior physicians from their appointments, the refusal of the committee of management to hold a conference with us, and their neglect to formally offer beds to the senior physician, but was justified and indeed necessitated by any one of these actions alone.

We are, Sir, yours faithfully,

F. W. TUNNICLIFFE,
A. J. WHITING,

Late Chairman and Honorary Secretary of the Medical Board of the Mount Vernon Hospital and Representatives of the Medical Staff on its Committee of Management.

Nov. 28th, 1913.

## BIG GAME AND SLEEPING SICKNESS VERSUS MAN AND HIS ANIMALS.

*To the Editor of* THE LANCET.

SIR,—Dr. J. L. Todd, in his letter to THE LANCET of Nov. 22nd, says: "The situation is clear: big game—especially antelopes—are the reservoirs of, and Glossina morsitans is the carrier of, trypanosomes which cause fatal diseases in man."

As the experiments of Kinghorn and Yorke only tend to show this to a greater or less extent according to opinion, it is hardly the case that the situation is clear. The trypanosome which Kinghorn and Yorke accuse in the game is probably T. brucei according to some of our best scientists, and although its morphology may be much the same as what is known as T. rhodesiense, and although the pathogenicity to animals may be much the same in the case of both trypanosomes, yet there is no direct evidence that it has been conveyed to man with evil results either by morsitans or otherwise. Indeed, Tante's experiment on himself when he allowed infected morsitans to feed on himself without evil result goes to prove the contrary, as well as the fact that the four white men representing the first cases on record attributed their infection to a severe bite quite different from that of G. morsitans.

It has been contended that it is contrary to morality and against law to experiment on humans other than oneself in the laboratory by letting morsitans feed on them, but an experiment in nature is worth 1000 laboratory experiments, and is this not now going on every day in the Loangwa valley? And what is the result? Although 16 per cent. of the big game is said to be infected,

and morsitans swarms in myriads, yet May shows there are fewer cases to be found than at his first examination. Bruce's theory that T. rhodesiense is nothing else than T. brucei must carry great weight, seeing the impossibility of identification by morphology only, and the likelihood of cases in South Rhodesia having been misdiagnosed as malaria, and this the more so now that cases of the same trypanosomiasis among men have been also there discovered distributed in the same sparse way. This theory, if correct, tends to show that this form of human trypanosomiasis has been with us from the commencement of our tropical inquiries at any rate, and is no new thing. His theory is also much supported by the difficulties with which the identification of a trypanosome is beset, considering the great variability in form, pathogenicity, chemo-resistance, virulence, and in development under different circumstances that this organism displays. In fact, the present confusion makes one inclined to think that varieties are apt to be raised to the level of species by the scientists who discover them, as in the case of the higher animals.

In conclusion, I would urge that as there is no new and terrible danger which is increasing, and as the new partial discoveries point to no new epidemic, it is not right on half evidence and half-digested facts to take so radical a measure as to condemn the big game in a fly country to wholesale extinction. I would therefore plead that further facts be collected to prove or disprove the theories of the advocates of such a course before proceeding to the slaughter.

I am, Sir, yours faithfully,

Ingatestone, Nov. 29th, 1913. SHEFFIELD NEAVE.

## VINEGAR AND ORANGE JUICE AS POSSIBLE CAUSES OF HÆMORRHAGE IN WOMEN.

*To the Editor of* THE LANCET.

SIR,—Upon various occasions I have seen female patients, both in hospital and private practice, who had been alleged to be hæmophilics. The grounds for this statement were either that there had been great and unaccountable loss of blood in an apparently healthy woman at her menstrual periods or immediately after the birth of a child. I have not been satisfied in a single instance that any case presented sufficient evidence to designate it as one of hæmophilia, and yet a thorough examination by a gynæcologist revealed nothing abnormal in the pelvic viscera, &c. An examination of the blood probably demonstrates a secondary anæmia if the patient has recently had a severe hæmorrhage, and this may be all that is found. The history is not at all like that of hæmophilia. Having had experience of three cases which apparently showed in one instance a connexion with vinegar drinking, in another with excessive eating of oranges, and in a third with both vinegar and oranges, I venture to bring them to the notice of my colleagues in order that others who have had similar experiences may be induced to record them.

The first case was that of a young primipara with no record of previous illness or menorrhagia, &c., and in whom nothing abnormal was found, and yet who very nearly bled to death after a normal labour. When she did recover it was ascertained that she had drunk copiously of vinegar every day during her pregnancy, a thing she had never done before or has done since.

The second case was a patient in St. Bartholomew's Hospital, and I am indebted to Dr. W. S. A. Griffith for being able to publish it. An unmarried woman, aged 23 years, suffered from menorrhagia so severely that her life consisted in having great losses of blood with inadequate periods of recuperation. When I saw her she presented the anæmic appearance of one who had lost a large quantity of blood. Her blood count was red blood corpuscles 3,600,000 and hæmoglobin 70 per cent., but she was then recovering. At this time her coagulation time and calcium content were normal. The facies strongly reminded me of an appearance I had once seen in factory girls whose "afternoon tea" consisted of red cabbage and vinegar. Questioned with regard to vinegar she admitted that for some time she had felt a great longing for vinegar itself, and also for anything that contained it. She further mentioned having eaten a large number of oranges last Christmas, and that she lost severely at her period which began next day. So much did this impress her that she immediately made up her mind not to eat oranges again. She left the hospital apparently well, and two months afterwards she was in splendid health. She had not had a period for nearly three months. She consented to try the effects of taking vinegar as she used to for two days. Her period came on in three days and she lost severely for the first two days. I did not like to repeat the experiment. She is now in excellent health again. I might mention that after taking vinegar for two days her coagulation time was increased by one minute.

The third case was in St. Bartholomew's Hospital under the care of Dr. H. Morley Fletcher, who kindly allowed me to see her. She was a married woman, aged 33 years, who had suffered from severe hæmorrhage upon the birth of her second, third, and fourth children. In hospital her blood count was red blood corpuscles 4,060,000, hæmoglobin 46 per cent., colour index 0·6, and leucocytes 4600. She said that she had been very fond of vinegar as a child, though not since. But she volunteered the statement that from the third month onwards during all her pregnancies, especially the second, third, and fourth, she had taken three oranges daily and continued with them up to the day of the child's birth.

In these three cases there may, or may not be, a direct connexion between the undue losses of blood and the oranges or vinegar, although perhaps one may say that the presumption is in favour of the suggestion. To carry the matter further, I did the following experiments at the Pathological Chemistry Department of St. Bartholomew's Hospital, thanks to the courtesy of Dr. A. E. Garrod. Various dilutions of malt vinegar with normal saline were made in suitable glass tubes after Wright's method, whereby the vinegar was 1 in 2, 1 in 4, 1 in 12, and 1 in 16, in normal saline. These were mixed separately with equal volumes of blood, kept at 37° C. for 20 minutes, and then fixed upright on a wall by means of plasticine. One hour later the results were read off. These were always compared with mixtures of equal volumes of normal saline and blood, treated similarly. The latter showed in every instance complete coagulation, which contrasted strongly with the solutions of vinegar, which demonstrated no sign of coagulation with the exception of the 1 in 16 solution. I kept these solutions for two months, and the only change was the appearance of some colouring matter in the vinegar solution, probably due to acid hæmatin. Filtered

orange juice was treated in the same way as the vinegar, and showed almost similar results, except that the corpuscles settled to the bottom and no acid hæmatin was seen. Undiluted orange juice produced a slight change in the blood, which looked like some proteid coagulation. I append the following results of other experiments:—

*Vinegar.*

Diluted 1 in 8 with normal saline + blood = no coagulation.
" 1 in 16 " " " + " = partial coagulation.
Normal saline + blood = complete coagulation.

*Sodium Acetate.*

1% solution in normal saline + blood = complete coagulation.
½% " " " " + " = " "
¼% " " " " + " = " "

*Sodium Acetate + Acetic Acid.*

(Sufficient acid was added to make solution distinctly acid to test papers.)
2% solution in normal saline + blood = no coagulation.
1% " " " " + " = " " if sufficient acid is present.
½% " " " " + " = " "

*Orange Juice.*

Diluted 1 in 4 with normal saline + blood = no coagulation.
" 1 in 8 " " " + " = " "
" 1 in 16 " " " + " = mostly coagulated.
Normal saline + blood = completely coagulated.

There are several matters upon which I hope to report further results at a future date, such as: 1. In what form are vinegar, orange juice, &c., absorbed into the circulation? 2. Are they able to repeat *in vivo* the results obtained *in vitro*? 3. What amount of any of them would be required to be absorbed into the circulation to produce menorrhagia or post-partum hæmorrhage? 4. Are all or only certain people liable to be so affected, and why? 5. If we assume that menorrhagia, &c., could be so produced, how long would the effect of these vegetable acids continue?

Again, the question may be considered, might vinegar and the others produce such effects upon the polymorphonuclear leucocytes or upon the tissue walls as to lead to diminished coagulability.

With regard to treatment one naturally suggests the stoppage of the supposed offending substance in the dietary and the exhibition of calcium salts.

I am, Sir, yours faithfully,

BERNARD MYERS, M.D.Edin., M.R.C.P.Lond.,
Medical Registrar to the Royal Waterloo Hospital.

Wimpole-street, W., Nov. 26th, 1913.

PS.—Since writing the above I have read a most interesting article by Sir A. E. Wright bearing upon this subject.[1] He writes: "Either oxalic acid, citric, tartaric or malic acids, or the soluble salts of these acids, are at our disposal for this purpose (the prevention of the coagulation of the blood). Oxalic acid and oxalates are, however, contra-indicated owing to their poisonous properties." He further states "that tartrates and citrates taken by the stomach showed no diminution in their action even in large doses." He demonstrated the fact that tartaric acid and also citric acid, if swallowed, gave in a few hours definite diminished blood coagulability. Thus the trend of his experiments also supports the suggestions made in this letter.

[1] Brit. Med. Jour., 1894, p. 60.

## RANGE OF FLIGHT OF MUSCA DOMESTICA.

*To the Editor of* THE LANCET.

SIR,—In your issue for to-day is a very interesting letter from Dr. J. T. C. Nash under the above heading. In view of the possibility of poliomyelitis being transmitted by the flies Stomoxys calcitrans, as I showed in a paper which recently appeared in your columns,[1] any evidence as to the range of flight of these latter flies would also be of extreme interest, and I write in the hope that Dr. Nash may be able to afford this.

I am, Sir, yours faithfully,

Harley-street, W., Nov. 29th, 1913. PAUL B. ROTH.

[1] THE LANCET, Nov. 15th, 1913, p. 1378.

## THE NATIONAL INSURANCE ACT.

### CLAUSE 2 (ii.) OF THE NEW DRAFT AGREEMENT.

WE published a letter from Dr. T. Cuming Askin in our issue of Nov. 22nd, stating the strong objection felt by many of the medical profession to the clause in the new draft agreement for panel practitioners which engages them to accept no fee from an insured patient beyond the payment for which their agreement provides. We sympathise with Dr. Askin's view, particularly because in the absence of a wage limit there is a large proportion of the insured public which could easily afford to pay extra fees. But it must be remembered that if the contracts for the treatment of insured patients are to be regarded as between the Insurance Committees and the medical practitioners—and there are distinct advantages to practitioners in regarding their contracts in this way—it is essential that no special bargains or arrangements should be introduced as between practitioners and patients that are unrecognised by the Commissioners. The East Suffolk Insurance Committee have endorsed the view of the Local Medical Committee and Dr. Askin with only one dissentient voice, replacing the word "accept" with the word "demand," and making the clause run:—

> The practitioner shall not demand any fee or other remuneration in respect of treatment which he is required to give under this agreement, except as provided in this agreement.

Since then the Insurance Committees of Kent and Surrey have interviewed the Commissioners upon this and other of the new Regulations with most satisfactory results. The Commissioners see nothing in the above clause to preclude agreements between insured patients and doctors to secure special treatment, if the patient understands what his statutory rights are, and himself requests an individual contract.

### EXTRAVAGANT USE OF DRUG FUNDS.

AN interesting report made by a Subcommittee of the Dundee Local Medical Committee deals with the question of the relative expense of prescriptions when economy is exercised and when proprietary articles are avoided and when these precautions are not exercised. The same subject was referred to with regard to the action of the Manchester Subcommittee in THE LANCET of Oct. 4th, p. 1033. At Dundee the Drug Fund for the past half year has been found to be exhausted and the Suspense Fund for the same period has been encroached upon to the extent of 2¾*d.* out of 3*d.* per insured person, the average cost per prescription having been found to be 10½*d.* The Subcommittee reports: 1. That expensive medicines and appliances are habitually ordered. 2. Also that excessive quantities are habitually ordered of certain applications and dressings. 3. That "multiple repeats" on one prescription form are habitually ordered. 4. That many prescription forms are unsigned. 5. That the use of the carbon interleaf is not adhered to.

6. That over 70 per cent. of the prescriptions were supplied to women. Women constitute about one-half of the total number of insured persons in this area. An analysis of the payments made to the chemists shows that, out of 33 chemists whose prescription forms range from 382 to 3173 in number, 19 are below the average (10½*d.*), the lowest being 7·3*d.*, and of the others three are above 1*s.*—viz., 1*s.* 2*d.*, 1*s.* 1*d.*, and 1*s.* 0½*d.* In the first case (1*s.* 2*d.*) the high average is due to having dispensed stock, vaccines, and many "multiple repeat" prescriptions. In the second case (1*s.* 1*d.*), to having dispensed, out of a total of 446 prescriptions, 119 for liq. paraffin and ext. of malt. In the third (1*s.* 0½*d.*), to having dispensed a greater proportion of prescriptions much above the average cost. The prescriptions of one of the chemists to the order of two practitioners were examined and a comparison made, and finally the Subcommittee suggested that, without infringing the liberty of the individual practitioner, efficient medication might be maintained and more economy exercised: (1) if, where a substance occurs both in the tariff list and under a proprietary name, the tariff name were systematically used; (2) if less quantities were ordered when there was no indication for prolonged use; and (3) if the practice of giving "multiple repeat" prescriptions were discontinued.

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### A CONFERENCE OF NON-PANEL PRACTITIONERS.

A conference of medical men representing non-panel associations was held at the Waldorf Hotel, London, on Saturday last, Nov. 29th, when 95 delegates attended, representing about 1000 members. Dr. J. S. Prowse, secretary of the National Medical Union, which body had summoned the conference, welcomed the delegates. On the motion of Dr. R. Carswell, Mr. William Coates, C.B., D.L., chairman of the National Medical Union, was called to the chair, Dr. Carswell and Dr. Prowse being elected secretaries of the conference.

The Chairman, in an introductory address, detailed the story of the fight which attended the coming into force of the National Insurance Act, and said that there was now no rallying ground for 10,000 non-panel practitioners who were convinced that the Act was derogatory to the medical profession and a menace to public health.

Mr. G. A. Wright then moved:—

That this meeting of delegates from non-panel medical associations agrees to form an organisation with central offices in London by the federation of existing non-panel bodies.

In support of the resolution he pointed to the increasing number of non-panel associations, the general dissatisfaction with the administration of medical benefits under the Acts, and the need for powerful combination to obtain drastic amendments. Protection, he said, was undoubtedly necessary against the effects of the Act in depriving doctors of their practices on no other ground than refusal to join a panel, while the work in many instances under the panel system was, he declared, worse than it had been under the old club system. The general approval of the medical profession was essential to the proper working of an Insurance Act, but 10,000 practitioners disapproved of the way in which medical benefits were being administered.

Dr. H. B. Greene, in seconding the resolution, said that the medical profession had been badly treated by politicians and capitalists, and that money might soon be used to bring millions of women and children under the operation of the Act.

The resolution was unanimously adopted.

Mr. F. Porter then proposed:—

That the principal condition of membership of the new association shall be the refusal of service in any capacity under the existing National Insurance Acts, 1911-1913.

He could not understand the position of non-panel men who joined committees under the Acts.

Dr. Carswell said that the point lay in the words "in any capacity." That was an uncompromising position to take up, but the conference was called to delimitate a new medical organisation. On biological principles it was better to define a species too narrowly than too broadly, so as to escape the difficulties of including incompatible elements.

Mr. E. B. Turner moved as an amendment to leave out all words after "shall be" and to substitute:—

That no member shall be on the panel, or have a partner or an assistant who is on the panel, or shall be a referee, or accept any paid office under the National Insurance Acts, 1911-1913.

He considered that the presence of strong non-panel men on the statutory committees was of value to the profession.

Dr. Montgomery Smith, in seconding the amendment, said that he was favourable to the resolution, but did not see how it could be carried out, and therefore supported the slower policy of the amendment. He reminded the conference that some of the best non-panel men were serving upon statutory committees at the invitation of those forming the conference.

After a keen debate, terminated by closure, the amendment was put to the meeting, the voting being by card according to the membership strength of the different associations. 530 votes were given against the amendment and 525 in favour of it.

Mr. Evan Jones then proposed an amendment to Dr. Porter's original resolution as follows:—

That the principal condition of membership of the new federation shall be that applicants for membership shall not be on the panel, directly or indirectly, and that all local associations shall have power of autonomy.

The amendment being carried with two dissentients was then agreed to as a substantive resolution, Mr. Porter saying that he would have to take the opinion of his constituents on the matter.

On the motion of Dr. J. Brassey Brierley, seconded by Dr. H. B. Woodcock, it was agreed that the federated societies should bear the name of the National Medical Union; and on the motion of Mr. Porter, seconded by Dr. O'Sullivan, the annual subscription was fixed at one guinea.

The conference passed a vote of sympathy with Mr. H. C. Meacock and other practitioners at Wisbech in the suffering that they had undergone in connexion with the working of the National Insurance Act, and a vote of thanks to Sir Henry Burdett for opening the columns of the *Hospital* to non-panel advocacy.

The following were elected the provisional officers:—Presidents: Mr. G. A. Wright and Professor William Russell. Vice-Presidents: Dr. John Playfair, Mr. William Coates, Dr. Bernard O'Connor, and Mr. V. T. Greenyer. Treasurers: Dr. Brassey

Brierley and Dr. H. Oppenheimer. Secretaries: Dr. R. Carswell and Mr. E. A. Dorrell.

The conference terminated with cordial votes of thanks to the chairman and secretaries.

### MR. LLOYD GEORGE AND THE UNALLOTTED FUNDS.

The letter of the Chancellor of the Exchequer to Mr. J. Arthur Dawes, M.P., read at the meeting of the London Insurance Committee on Nov. 27th leaves no doubt as to the writer's opinion that the funds accumulated in respect of unallotted patients should be divided among members of the medical profession who had accepted service under the Act at the time when the sums in question accrued. The full text of the letter has been widely published. It concluded with the sentence, "You may rest assured that the Government will certainly support your Committee in taking any steps which may prove necessary to secure that payment is made in accordance with their intention." This may be taken to mean that if legislation is deemed to be necessary before the money can be paid over the Government will give its support to any Bill to fulfil that object. Mr. Kingsley Wood, at the meeting referred to, observed that "the simple issue was whether the Committee had the legal power to pay the money, and no intervention of the Chancellor of the Exchequer could help them to solve it."

### DEATH OF AN UNALLOTTED PATIENT WITHOUT MEDICAL AID.

At Exeter recently a medical man, summoned to attend someone whom he did not know, and finding that the proposed patient was an insured person, but not on his list, declined to go. The patient died without any medical man having attended him, and at the inquest which followed it was suggested that the practitioner, who had in fact been called but had declined to accept the summons, deserved blame for his conduct. This is clearly unjust, for a medical man has no means of knowing that there is serious and urgent need for his services in the circumstances indicated, and in the case of an insured person on somebody else's list he would receive no payment for attending, unless the patient happened to be able to make one. In the case under discussion a fee could have been tendered. The patient had chosen when in health not to place his name upon the list of a medical man on the panel, and no insured person can reasonably plead ignorance of the provisions of the Insurance Acts and of the objects for which he pays a weekly tax.

### RUBBER STAMPS AND THE SIGNING OF CERTIFICATES: A TEST CASE.

The question whether medical men practising under the Insurance Acts may use rubber stamps instead of writing their signatures upon certificates of incapacity has been raised by an action in the City of London Court, in which a woman named Kipps sued the Prudential (Approved) Society for Women for sickness benefit. This had been refused on the ground that the medical certificate submitted by the plaintiff to the society had been signed with a rubber stamp. It was mentioned that rubber stamps had been misused by persons other than the medical men whose signatures they represented getting possession of them. The question of jurisdiction was raised, but his honour Judge Rentoul held that the jurisdiction of the court was not ousted by the Insurance Acts. Upon the facts, which were not disputed, he found for the plaintiff for the amount claimed with costs; that is to say, he held that the signature appended by means of a rubber stamp was sufficient to satisfy the requirements of the Acts, and should be recognised as such by Approved Societies. We entirely approve of the finding, and our view will not be altered even if the results of the appeal should uphold the view of an Approved Society.

### THE DEATH OF DR. HORACE DIMOCK.

The inquest on the late Dr. Dimock was concluded on Wednesday last, when the jury returned a verdict of death from the effects of self-administered poison, whilst temporarily insane as a sequel to mental depression. Dr. W. H. Willcox found 2·67 grains of morphine and 6·7 grains of veronal in the parts of the body examined, and said that the dose taken of morphine would probably have been fatal to one not accustomed to morphine, and that the combination with veronal would increase the poisonous action. The coroner refused to permit a legal representative to point out the absence of evidence that the Wisbech medical practitioners had persecuted the late Dr. Dimock, but said that it was only fair to suppose that one practitioner would not set the criminal law in motion against another without strong evidence in support of such action.

The need for inquiry into the circumstances precedent to Dr. Dimock's suicide therefore remains.

### THE LAMBETH INSURANCE PRACTITIONERS' ASSOCIATION.

A joint meeting of the Borough of Lambeth Insurance Practitioners' Association and the Borough of Southwark Panel Association was held on Nov. 26th, when 91 practitioners were present, Dr. Herbert Taylor in the chair. The meeting discussed the terms of the new draft agreement in conjunction with the alterations proposed at a conference between deputations of the Panel Committee for London and the London Insurance Committee. The meeting expressed approval of the suggested alterations, the principal of which were: Clause 2: Subsection i., after "him" on line 3 to add "and who produces reasonable proof of being so entitled" and after "confinement" on line 8 "or illness arising from a confinement and within four weeks of such." Clause 2, Subsection ii., to change "accept on first line to 'demand'". Clause 7: Line 2 to change "treatment" to "attendances." Clause 12: Subsection i., line 4, to change "conveniently" to "reasonably." Clause 13: Subsection i., line 3, to add after "patient," "who has complied with the rules of of the Committee laid down for the proper administration of medical benefit." Schedule I. to add after "certificates" on line 4 "for the purposes of the principal or amending Acts."

A strong expression of feeling was manifested that the terms in which the amount of remuneration are stated in Schedules I. and II. do not make it sufficiently plain that the 6*d.* per annum for persons eligible for sanatorium benefit only exclude a small number of insured persons.

Dr. Lauriston Shaw then explained the various clauses and proposed amendments, and removed doubts as to the working of Clause 13, having

heard Sir Claud Schuster's explanation before the Advisory Committee.

The proposed election of a Local Medical Committee for London was discussed, and it was resolved that

**Any scheme for the election of a Local Medical Committee for London shall provide that candidates must reside in the boroughs they will represent if elected.**

A copy of this resolution was sent to the Commissioners.

The main resolution passed by the meeting was as follows:—

That the time allowed for consideration of the terms of the new agreement is quite inadequate; that some of the new conditions are onerous; that the just dues of the panel practitioners have not been met; that the obligation on the part of the Insurance Committee to furnish each practitioner with a full list of his patients has not been discharged; and that, therefore, the desirability is urged of allowing additional time in which the representatives on the Panel Committee may consider the new terms. The resolution also asked that the obligations of the Insurance Committee, both financial and clerical, shall be discharged or a suitable guarantee given that such obligations shall be discharged before the date of signing the agreement.

The meeting terminated with hearty votes of thanks to the Chairman and to Dr. Lauriston Shaw for attending the meeting and for his services to panel practitioners.

### THE SHOREDITCH MEDICAL UNION.

A letter has been sent by this Union to the Insurance Commissioners protesting against the recognition by the Commissioners of the Provisional Panel Committee for the County of London, or a committee elected by the same, as the Panel Committee for London under the National Insurance Amendment Acts. The Shoreditch Medical Union consider that the Committee is not representative of London panel practitioners, and has not been duly and properly elected. In their protesting letter it is pointed out that "there are no representatives of two of the metropolitan boroughs—viz., Holborn and Shoreditch." "The Shoreditch Medical Union," adds the letter, "which includes all the practitioners in the borough with the exception of two, of whom all but three are on the panel, therefore earnestly requests the Commissioners to carry out the scheme proposed in their recent circular for the election of a Panel Committee for the County of London, nominations for which have already been sent in by this Union." The letter is signed by Dr. Major Greenwood as president, and Mr. J. Houston Porter as honorary secretary of the union.

THE AFTER-CARE ASSOCIATION.—Two important meetings have lately been held in connexion with this association, whose objects are to assist cases discharged from asylums for the insane. The first was held at Rubery Hill Asylum, Birmingham, in which city a branch was started in the early part of the present year, and has already done much good work. The chair was taken by Councillor David Davis, chairman of the Asylums Committee, and an address on the work of the association was given by Mr. Thornhill Roxby. There was a good attendance, and the meeting resulted in a useful addition to the funds of the local branch. The second meeting was held at Bootham Park Hospital, York. The chair was taken by Canon Tupper-Carey, and addresses were given by Canon Watson, Dr. Bedford Pierce, and Mr. Roxby. There was a good audience, and many new subscribers were enrolled in the York branch. This association is the only one of the kind in Great Britain, and last year 391 cases were dealt with by the council.

# Medical News.

UNIVERSITY OF CAMBRIDGE.—At a congregation held on Nov. 28th the following degree was conferred:—

*M.D.*—H. E. S. Stiven (by proxy), Trin.

The State Medicine Syndicate have appointed Dr. H. K. Anderson, master of Gonville and Caius College, Professor Sir T. Clifford Allbutt, and Dr. A. D. Thompson, medical superintendent of the Cambridge County Asylum, to be members of the managing committee for the diploma in psychological medicine for the three years ending Dec. 31st, 1916. The General Board of Studies will shortly appoint a temporary lecturer in animal embryology for five years at an annual stipend of £100.

FOREIGN UNIVERSITY INTELLIGENCE.—*Algeria:* Dr. Battez has been appointed after public "concours" Professeur Agrégé of Physiology.—*Berlin:* The title of Professor has been granted to Dr. Hans Kohn, assistant editor of the *Berliner Klinische Wochenschrift*, an eminent pathologist, prosector to the University Outpatient Institute; also to Dr. Heinrich Haike, *privat-docent* of otology, and to Fräulein Dr. Rahel Hirsch, assistant physician in the "Second" University Medical Clinic.—*Bordeaux:* After public "concours" Dr. Delaunay has been appointed Professeur Agrégé of Physiology, and Dr. J. Teulières Professor Agrégé of Ophthalmology.—*Freiburg:* Dr. G. Holtz, assistant surgeon to the Würzburg University Surgical Clinic, has been offered the chair of Surgery, in succession to the late Dr. E. Goldmann.—*Gratz:* Dr. K. B. Hofmann, principal of the Institute of Medical Chemistry, is retiring.—*Greifswald:* Dr. Paul Morawitz, extraordinary professor in the University of Freiburg, has been offered the post of Director of the University Medical Clinic, in succession to Dr. Steyrer, who is migrating to Innsbruck.—*Heidelberg:* Dr. Hans Petersen, who is Ph.D. as well as M.D., prosector to the University Anatomical Institute, has been recognised as *privat-docent* of Anatomy.—*Magdeburg:* Dr. Weinbrenner, gynæcologist to the Red Cross Hospital, has been appointed Chief Physician to the Gynæcological Department of the Municipal Hospital, in succession to the late Dr. Thorn.—*Marburg:* Dr. Ernst Frey (formerly of Jena), *privat-docent* of pharmacology, has been granted the title of Professor.—*Montevideo:* Dr. Juan Carlos Dighiero and Dr. Carlos Brito Foresti have been appointed Professors of Medical Pathology. Dr. Lorenzo Mérola has been appointed Professor of Operative Medicine. Dr. Juan Pou y Orfila has been appointed Professor of Midwifery and Gynæcology. Dr. Angel Gaminara has been appointed to the chair of Medical Natural History, in succession to Dr. Garcia Lagos. The chair of General Pathology has been assigned, after public competition, to Dr. Arnoldo Berta.—*Montpellier:* Dr. Lisbonne has been appointed after "concours" Agrégé of Physiology.—*Munich:* Dr. W. Heuck has been appointed to the post of Principal Physician of the Dermatological and Venereal Department of the Swabing Hospital.—*Strasburg:* Dr. G. Hugel has been recognised as *privat-docent* of Dermatology.—*Toulouse:* Dr. Tournade has been appointed after "concours" Agrégé of Physiology.—*Würzburg:* Dr. Lobenhoffer, of Erlangen, has been appointed Chief Surgeon to the University Surgical Clinic, with charge of the Policlinic, in succession to Dr. Hotz, who goes to Freiburg, and has been recognised as *privat-docent* of Surgery.

PRESENTATIONS TO MEDICAL MEN.—The North of England Branch of the British Medical Association on Nov. 27th, at the County Hotel, Newcastle, entertained at a complimentary banquet Mr. D. F. Todd, to whom was made a presentation in recognition of his services to the medical profession. The gifts consisted of a silver gilt rose bowl, being a replica of an ancient Gothland bowl, a cheque for £300, and an illuminated album containing the signatures of the subscribers. On the bowl was inscribed: "Presented to Dr. David F. Todd by the medical practitioners in the North of England as a memento of the many valuable services rendered by him to the profession." Dr. L. G. Fraser (North Shields), president of the branch, occupied the chair and delivered a eulogy of the guest of the evening. Mr. Todd responded amidst much enthusiasm.

Dr. Farquharson proposed the toast of "The Guests" in a humorous speech, and Mr. M. Dillon in reply acknowledged the services of Mr. Todd both to the profession and to the public. Many who were unable to be present at the dinner sent letters of apology and appreciation of Mr. Todd's work and worth.—At Torquay on Nov. 19th Dr. William Odell was presented by the members of the local branch of the Young Men's Christian Association with an illuminated address and an inscribed silver salver on the occasion of his leaving for St. Mary Church. Dr. Odell has taken great interest in the work of the Y.M.C.A., and for seven years was president of the Torquay branch.

LISTER MEMORIAL FUND.—The following contributions have been made recently to the Lister Memorial Fund: Newcastle-on-Tyne committee, £46 7*s.*; members of the Newcastle-on-Tyne Clinical Society, £61 9*s.*; Newcastle-on-Tyne Clinical Society, £5 5*s.*; British Medical Association, Ceylon Branch, £14 7*s.* 9*d.*; Burma Branch, £19 3*s.* 7*d.*; Otago Division, New Zealand Branch, £5 5*s.*; Union of Swedish Hospital Surgeons, £20; University of Nancy (Faculty of Medicine), 100 francs; University of Bordeaux (Faculty of Medicine), 150 francs; Nottingham Medico-Chirurgical Society, £6 9*s.*; Plymouth Medical Society, £5 5*s.*; and Wigan Medical Society, £2 2*s.* Donations may be sent to the honorary treasurers of the fund at the Royal Society, Burlington House, London, W.

SOCIETY OF APOTHECARIES: DINNER TO THE LORD MAYOR OF LONDON.—On Friday evening, Nov. 28th, the Society of Apothecaries entertained the Lord Mayor of London and the Sheriffs, as representatives of the Corporation of the City of London, and other distinguished guests representing the Royal College of Physicians of London, the Royal College of Surgeons of England, and the Pharmaceutical Society. To a large and representative company the Master of the Society of Apothecaries, Mr. Martindale Ward, explained the close connexion of the Society with the Royal Corporations, and commented on the fact that there were present at table, in the new Lord Mayor, one of the youngest occupants of the great civic chair, as well as his predecessor, Sir Thomas Crosby, who possessed the distinction of being the oldest man who had ever been elected to that dignified office, as well as being the only medical Lord Mayor of recent times. Sir Vansittart Bowater, in replying for the Corporation of London, took up the comparison of his own age with Sir Thomas Crosby's age by pointing out that in this way the Corporation of London could well be symbolised, possessing as it did both the dignity and experience appertaining to age and the progressive spirit associated with youth. The senior warden, Mr. Meredith Townsend, in proposing the prosperity of "The Royal Colleges," alluded to their historic rivalries and associations with each other and with the Society of Apothecaries. Dr. Norman Moore, speaking for the Royal College of Physicians of London, explained the evolution of learned corporations from the old trade guilds. He pointed out that in the Inns of Court we still possessed examples of the old guild in its purest state—namely, an association of men with common interests working for the good of the country by the advancement of those interests and the care and education of the recruits to their calling. In the Society of Apothecaries we had, he said, a good example of the mediæval guild enjoying privileges under a Royal Charter; while in the Royal College of Physicians we had a corporation having its origin in the spread of learning which followed the great Renaissance, the object here being primarily the inculcation of wisdom and the diffusion of knowledge. In a learned and humorous little address Dr. Moore happily pictured the advantages that the audience would have derived by hearing from their own lips the conversation of Mayerne and Tyson, who undoubtedly as representatives of the College of Physicians at their respective far-off days had dined as guests with the Society of Apothecaries. Mr. G. H. Makins, who replied for the Royal College of Surgeons of England, described his own experiences as a candidate for the Licence of the Apothecaries Society, when he triumphantly passed the ordeal after being told by a venerable examiner in obstetrics that "if you did that thing, Mr. Makins, you would be a very naughty boy." The toast of "The Society of Apothecaries of London" was proposed by Sir David Ferrier and responded to by the Master; and that of "The Pharmaceutical Society," to which the President, Mr. Edmund White, replied, was given by Mr. G. Amsden, the Junior Warden. An excellent programme of music was interleaved with the speeches, the singers being Miss Edith Trevor, Miss Carrie Herwin, Mr. John Collett, and Mr. Edgar Coyle.—At a meeting of the Court held before the dinner Sir William H. Power, F.R.S., formerly principal medical officer of the Local Government Board, was elected an honorary freeman of the society in recognition of his services to the State in regard to public health, while the Master also presented the gold medal of the society to Mr. J. E. Harting in response to services rendered in preparing a catalogue for the library of the society.

THE LATE MR. EDWARD NETTLESHIP'S BEQUESTS.—Subject to some small legacies, the late Mr. Nettleship, whose estate was of the gross value of £26,768 gross, with net personalty sworn at £23,225, left his property to his wife for life, and on her death £3000 to St. Thomas's Hospital to create or augment a fund for the endowment of lectureships in the medical school, and £1000 to the Royal London Ophthalmic Hospital. He also left, if the ultimate residue of his property should exceed £9000, a further £2000 to St. Thomas's Hospital Medical School for the same purpose as the above-mentioned legacy of £3000, and he also directed that £1000 additional should be paid to the Royal London Ophthalmic Hospital.

GLASGOW UNIVERSITY CLUB.—The annual dinner of the Glasgow University Club was held on Nov. 28th at the Trocadéro Restaurant, the chair being taken by Sir William S. McCormick, LL.D., secretary of the Carnegie Trust. Many medical graduates were present. In proposing the toast of "The University and the Club," the chairman said that they met under the shadow of the illness of their Principal, Sir Donald MacAlister. He was glad to say, however, that on the road south he had seen Sir Donald, who had asked him to tell them that he was progressing more rapidly than the doctors reported. He suggested that a telegram be sent to Sir Donald and Lady MacAlister, which was heartily acclaimed. Continuing, he spoke of his experience as secretary of the Carnegie Trust, which had disclosed to him unlimited defects in the University accommodation as shown by the complaints of the professors. An American millionaire who had recently visited him had startled him by asking how he would figure out the property, income, equipments, buildings, and so forth of a Scottish university—Glasgow, for instance—what they would stand at if being bought over. Having spent some time in figuring it out with his American friend, he gave his hearers the results of those calculations. When the University was removed in 1875 from High-street to its present position it had a sum of £400,000, of which £120,000 was contributed by the Government. With this sum they provided themselves with their present accommodation, then the most splendid university buildings in Europe. There was not a grumble as to accommodation from anyone, yet now, one generation later, many of the professors—among them those of anatomy, botany, chemistry, and natural philosophy—had left the old buildings as they would leave a rabbit warren, finding it impossible to conduct their business therein. Then they knew nothing of pathology in those days, and he could not say how much had been spent on Professor Muir's buildings, as they were only leased by the University from the Western Infirmary. Then their Randolph and Bute Halls, the Students' Union and Queen Margaret's College had been built. But notwithstanding that they had double the value in buildings in 1913 that they had in 1875, they were so discontented that extensions were contemplated that would require another million and a half of unremunerative—though not unproductive—capital. The income from all sources had increased from £27,900 in 1875 to £91,925 in 1912 (which capitalised meant £300,000 in 1875, or £3,000,000 in 1912), and of this students' fees now contributed £43,000, as against £12,000 in 1875. It was being spent well, yet the needs of the University were steadily growing. The students had increased in numbers from 1600 in 1875 to 2800 in 1912; the professors from 26 in 1875 to 36 in 1912; the lecturers from 1 to 75; the assistants from 12 to 60. The tutorial salaries in 1875 were £1680, in 1912 £23,098. The total contributions of students had risen from £12,000 to £43,000. Dr. J. Yule Mackay proposed the toast of "The Guests," which was responded to by Sir J. H. Biles, who referred to the presence of Professor Sadler,

of the University of Michigan, and Rear-Admiral Capps, of the United States Navy, who were in England on account of the International Congress for the Safety of Life at Sea; also Mr. Ferguson, a former student of his own, now in command of the greatest dockyard in the United States, and Sir Archibald Denny, whom he described as one of Glasgow's greatest men. Sir Archibald Denny and Dr. Gregory Foster, Provost of University College, also replied. The Rev. J. Campbell Taylor proposed the toast of "The Chairman."

THE Representative Body of the British Medical Association at a special meeting on Thursday, Dec. 4th, passed by the requisite majority the proposal to increase the annual subscription for all members of the Association resident in the British Islands to 2 guineas per annum. 131 voted for the change, 42 against, and 2 did not vote.

WESTON-SUPER-MARE HOSPITAL.—On Nov. 26th a new wing fitted up for the X ray apparatus was formally opened at the Weston-super-Mare Hospital by Mr. E. Baker in the presence of a large gathering.

WILTSHIRE COUNTY ASYLUM, DEVIZES.—At the last meeting of the Wilts county council it was decided to erect a new detached block to the county asylum to provide accommodation for 200 additional patients. The cost of the scheme will be about £30,000.

A CORNISH CENTENARIAN.—The Rev. Philip Carlyon died at Falmouth on Nov. 18th, aged 101 years. The deceased was a man of extraordinary vitality and took walks and attended church regularly until quite recently. He was born at St. Mawgan-in-Pyder, Cornwall, and had he lived until Dec. 30th he would have been 102 years of age.

BRISTOL MEDICAL SCHOOL DINNER.—At the annual dinner of the Bristol Medical School held at the Royal Hotel a large and cheerful company of past and present students assembled. The health of the guest of the evening, Sir Felix Semon, was proposed by Mr. F. Richardson Cross. In his reply Sir Felix Semon made an extremely interesting comparison between the extent of medical knowledge as it is to-day and as it was when he first came to London. He added some adverse criticisms on the report of the Royal Commissioners on University Education in London in so far as it seemed to limit clinical teaching, remarks with which the Vice-Chancellor, Sir Isambard Owen, agreed when replying later for the University of Bristol. Dr. J. Michell Clarke spoke hopefully of the future of the Bristol Medical School, saying that more research is being carried on now than at any previous time in its history. In an amusing speech Mr. G. Munro Smith proposed the health of the chairman, Dr. P. Watson-Williams, remarking that the throat specialist who performed the largest number of capital operations in Britain was the public hangman. There were some good songs, to which Sir Felix Semon added several pianoforte solos, including one of his own composition.

## BOOKS, ETC., RECEIVED.

ADLARD AND SON, Bartholomew Press, Bartholomew Close, London, E.C. COMBRIDGE AND CO., Dublin. HANNA AND NEALE, Dublin. ROTUNDA HOSPITAL, Secretary of, Dublin.

The Book of the Rotunda Hospital. An Illustrated History of the Dublin Lying-in Hospital from its Foundation in 1745 to the Present Time. By T. Percy C. Kirkpatrick, M.D., M.R.I.A., Fellow and Registrar of the Royal College of Physicians of Ireland. Edited by Henry Jellett, M.D., F.R.C.P.I., Master of the Hospital. Prices: cloth boards, 16s.; rexine, 18s.; half "Persian morocco," 30s.; half morocco leather, 32s. (The profits of the sale of the book will be given to the funds of the hospital).

BALE (JOHN), SONS, AND DANIELSSON, LIMITED, London.

A Manual of Practical Chemistry for Public Health Students. Especially arranged for those studying for the D.P.H. By A. W. Stewart, D.Sc., Assistant Demonstrator of Chemistry at the Royal Institute of Public Health. Price 3s. 6d. net.

The Tuberculosis Year Book and Sanatoria Annual. Edited by T. N. Kelynack, M.D. Volume I. 1913-1914. Price 7s. 6d. net.

BARTH, JOHANN AMBROSIUS, Leipzig.

Lehrbuch der organischen Chemie für Mediciner. In siebzehn Vorträgen. Von Dr. chem. et med. G. v. Bunge, Professor in Basel. Zweite vermehrte und verbesserte Auflage. Price, paper, M.7; bound, M.8.25.

CHAMBERS, W. AND R., LIMITED, 38, Soho-square, London, W., and 339, High-street, Edinburgh.

Physics. An Elementary Text-book for University Classes. Third edition, thoroughly revised and amplified. By C. G. Knott, D.Sc. Edin., F.R.S.E., General Secretary of the Royal Society, Edinburgh. Price 7s. 6d.

FISCHER, GUSTAV, Jena.

Handbuch der Vergleichenden Physiologie. Herausgegeben von Hans Winterstein in Rostock. Achtunddreissigste Lieferung. Band III. Physiologie des Energiewechsels, Physiologie des Formwechsels. Erste Hälfte. Seite 1295–1446. Price M.5.

Handbuch der pathogenen Mikroorganismen. Herausgegeben von Dr. W. Kolle und Dr. A. von Wassermann. Zweite vermehrte Auflage. Dreiundsechzigste Lieferung (Bd. VIII., Seite 609–720.) Price M.5.

Entwicklung und gegenwärtiger Stand der Arsentherapie der Syphilis, mit besonderer Berücksichtigung des Salvarsans (Ehrlich-Hata 606) und des Neosalvarsans. Nebst einer systematischen Zusammenstellung der bisher veröffentlichten Literatur. Von Dr. med. Victor Mentberger, Assistenzarzt der Universitäts-Hautklinik zu Strassburg i. Els. Price M.9.

GRIFFIN, CHARLES, AND CO., LIMITED, London.

Practical Sanitation. A Handbook for Sanitary Inspectors and others interested in Sanitation. By George Reid, M.D., D.P.H. Seventeenth edition, revised. Price 6s.

KELLY, CHARLES H., 25–35, City-road, and 26, Paternoster-row, London, E.C.

National Health Manuals. Youth. Edited by T. N. Kelynack, M.D. Price, limp cloth, 1s. net; cloth boards, 1s. 6d. net.

LAURIE, T. WERNER, LIMITED, Clifford's Inn, London.

Wet Magic. By E. Nesbit. With Illustrations by H. R. Millar. Price 6s.

"LE PROGRÈS MÉDICAL," Rédaction et Administration, 41, Rue des Écoles, Paris.

Medicus. Guide-Annuaire des Étudiants et des Praticiens. 41e Année. 1914. Price Fr.5.

LIPPINCOTT (J. B.) COMPANY, Philadelphia and London.

Surgery of the Vascular System. By Bertram M. Bernheim, A.B., M.D., Instructor in Surgery, the Johns Hopkins University, Baltimore, Md. Price 12s. 6d. net.

International Clinics. A Quarterly. Edited by Henry W. Cattell, A.M., M.D., Philadelphia, U.S.A., with Collaboration. Volume III. Twenty-third Series, 1913. Price 35s. net per year (four volumes).

LIVINGSTONE, E. AND S., Edinburgh.

Materia Medica Notes. By James A. Whitla, L.R.C.P. & S., L.P.S.I. Price 2s. 6d. net.

LONGMANS, GREEN, AND CO., London, New York, Bombay, and Calcutta.

The Progress of Scientific Chemistry in our Own Times, with Biographical Notices. By Sir William A. Tilden, F.R.S., D.Sc. Lond., Sc.D. Dub., D.Sc. Vict., LL.D. Birm. Second edition. Price 7s. 6d. net.

OLIVER AND BOYD, Edinburgh.

The Transactions of the Edinburgh Obstetrical Society. Vol. XXXVIII. Session 1912–1913. Price not stated.

ST. CATHERINE PRESS, THE, 34, Norfolk-street, Strand, London, W.C. (For the National Food Reform Association.)

Rearing an Imperial Race. Containing a full Report of the Second Guildhall School Conference on Diet, Cookery, and Hygiene, with Dietaries; Special Reports from H.M. Ambassadors Abroad, Articles on Children's Food Requirements, Clothing, &c. Edited by Charles E. Hecht, M.A. Price 7s. 6d. net.

# Appointments.

*Successful applicants for vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward to* THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, such information for gratuitous publication.*

ANDREWS, J. A., M.B., Ch.B. Edin., has been appointed Certifying Surgeon under the Factory and Workshop Acts for the Lochgilphead District of the county of Argyll.

BARRINGTON, F. J. F., M.S. Lond., F.R.C.S. Eng., has been appointed Surgical Registrar to University College Hospital.

BOLT, RICHARD FRANK, L.R.C.P. Lond., M.R.C.S., has been appointed House Surgeon at the Queen Victoria Memorial Hospital, Nice.

BROTCHIE, R. T., has been appointed Certifying Surgeon under the Factory and Workshop Acts for the Tarbert District of the county of Argyll.

CLIFFORD, HAROLD, M.B. Lond., F.R.C.S. Edin., M.R.C.S. Eng., L.R.C.P. Lond., has been appointed Honorary Gynæcologist to the Salford Royal Hospital.

FLETCHER, W. J., L.A.H. Dub., has been appointed Certifying Surgeon under the Factory and Workshop Acts for the Stoney Stanton District of the county of Leicester.

GRAHAM, LEWIS, M.S. Lond., F.R.C.S. Eng., has been appointed Honorary Obstetric Registrar to the Birmingham Maternity Hospital.

HAYES, J. G., L.R.C.P. & S. Irel., has been appointed Clinical Assistant to the Chelsea Hospital for Women.

HORTON, R. L., M.B., B.S., has been appointed House Physician at University College Hospital.

MAYNE, W. H., M.B., B.Ch. Dub., has been appointed Certifying Surgeon under the Factory and Workshop Acts for the Warrenpoint District of the county of Down.

MORTON, S. E., M.R.C.S., L.R.C.P. Lond., has been appointed Certifying Surgeon under the Factory and Workshop Acts for the Matlock District of the county of Derby.

OWEN, W. D., M.R.C.S., L.R.C.P. Lond., has been appointed Certifying Surgeon under the Factory and Workshop Acts for the Whitland District of the county of Carmarthen.
PEARSON, W. J., M.B., B.C. Oxon., has been appointed Resident Medical Officer at University College Hospital.
POWNE, LESLIE, M.R.C.S., L.S.A., has been appointed Medical Officer of Health for the Crediton (Devon) Rural District Council.
RIGHY, C. S., has been appointed Certifying Surgeon under the Factory and Workshop Acts for the Sedgeley District of the county of Stafford.
SAUNDERS, P. W., M.B., M.R.C.P. Lond., has been appointed Assistant Physician to the Royal Free Hospital.
WALLACE, J. M., M.B., B.C. Cantab., has been appointed Assistant in the Clinical Pathology Department at University College Hospital.
WINTLE, COLSTON, L.R.C.P. Lond., M.R.C.S., has been re-elected Chairman of the Health Committee of the Bristol Town Council.
WYARD, STANLEY, M.D., B.S. Lond., M.R.C.P. Lond., has been appointed Pathologist to the Bolingbroke Hospital, S.W.

# Vacancies.

*For further information regarding each vacancy reference should be made to the advertisement (see Index).*

ARGYLL AND BUTE ASYLUM, Lochgilphead.—Assistant Medical Officer, unmarried. Salary £200 per annum, with apartments, board, and laundry.
ASHTON-UNDER-LYNE UNION.—Resident Assistant Medical Officer. Salary £150 per annum, with rations, laundry, and residence.
BIRMINGHAM CITY HOSPITAL, Lodge-road.—Assistant Resident Medical Officer. Salary £150 per annum, with board, residence, &c.
BRENTFORD UNION INFIRMARY, WORKHOUSE, AND SCHOOLS, Isleworth, W.—First Assistant Medical Superintendent, &c. Salary £185 per annum, with apartments, rations, washing, &c.
BRIGHTON, ROYAL SUSSEX COUNTY HOSPITAL.—Assistant House Surgeon, unmarried. Salary £80 per annum, with apartments, board, and laundry.
BRIGHTON THROAT AND EAR HOSPITAL, Church-street, Queen's-road.—Non-resident House Surgeon for six months. Salary at rate of £150 per annum.
BRISTOL ROYAL INFIRMARY.—House Surgeon for six months for Throat, Nose, and Ear. Salary £100 per annum, with board, apartments, and laundry.
CAMBERWELL INFIRMARY, Brunswick-square.—Third Assistant Medical Officer. Salary £150 per annum, with apartments, board, and washing.
CAMBRIDGESHIRE COUNTY COUNCIL.—Female Assistant County Medical Officer. Salary £300 per annum.
CANCER HOSPITAL, Fulham-road, S.W.—Medical Registrar. Salary £100 per annum. Also Assistant in Chemical Department Research Institute. Salary £200 per annum.
CANTERBURY, KENT AND CANTERBURY HOSPITAL.—Senior House Surgeon and Junior House Surgeon, unmarried. Salaries £100 and £90 per annum respectively, with board, lodging, and washing.
CARDIFF, KING EDWARD VII.'s HOSPITAL.—Two Honorary Assistant Physicians. Also Senior Resident Medical Officer. Salary £120 per annum, with board, washing, and apartments.
CARMARTHEN, JOINT COUNTIES ASYLUM.—Second Assistant Medical Officer. Salary £180 per annum, with board, lodging, washing, &c.
CHARING CROSS HOSPITAL.—Medical Registrar.
CHESTER, COUNTY ASYLUM.—Third Assistant Medical Officer, unmarried. Salary £200 per annum, with board, lodging, and washing.
CHESTER GENERAL INFIRMARY.—House Surgeon. Salary £100 per annum, with residence and maintenance.
COLCHESTER, ESSEX COUNTY HOSPITAL.—House Physician. Salary £100 per annum, with board, residence, and washing. Also House Surgeon. Salary £100 per annum, with board, washing, and residence.
COVENTRY AND WARWICKSHIRE HOSPITAL, Coventry.—House Physician. Salary £110 per annum, with residence, board, laundry, and attendance.
CROYDON GENERAL HOSPITAL.—Additional Member of Honorary Medical Staff.
DARTFORD, DARENTH INDUSTRIAL COLONY, Kent.—One Second and one Third Assistant Medical Officer, unmarried. Salaries £210 and £180 respectively, with board, lodging, and washing.
DUMFRIES AND BURGHS, COUNTY OF.—Two Medical Assistants to Medical Officer of Health and School Medical Officer. Salary £250 per annum.
DUNDEE MATERNITY HOSPITAL.—Out-door Assistant for three months. Salary at rate of £40 per annum, with board, lodging, and laundry.
EXETER, ROYAL DEVON AND EXETER HOSPITAL.—Assistant House Surgeon for six months. Salary at rate of 100 guineas per annum, with board, apartments, and washing.
GATESHEAD ASYLUM, Stannington, Northumberland.—Assistant Medical Officer, unmarried. Salary £220 per annum, with rooms, board, and laundry.
GLASGOW DISTRICT MENTAL HOSPITAL, Gartloch.—Junior Medical Officer. Salary £200 per annum, with board, lodging, and laundry.
GLENALMOND, TRINITY COLLEGE.—Resident Medical Officer.
GOVAN DISTRICT ASYLUM, Crookston, near Glasgow.—Senior and Junior Assistant Medical Officers. Salaries £250 and £200 per annum respectively, with apartments, board, and laundry.
GREAT YARMOUTH HOSPITAL.—House Surgeon, unmarried. Salary £100 per annum, with board, lodging, and washing.
HALIFAX ROYAL INFIRMARY.—Third House Surgeon, unmarried. Salary £80 per annum, with residence, board, and washing.
HARROGATE INFIRMARY.—Resident House Surgeon. Salary £75 per annum.
HASTINGS, EAST SUSSEX HOSPITAL.—Senior House Surgeon. Salary £160 per annum, with residence, board, and washing. Also Assistant House Surgeon. Salary at rate of £80 per annum, with residence, board, and washing.
HOSPITAL FOR SICK CHILDREN, Great Ormond-street, W.C.—Casualty Medical Officer. Salary £200 per annum, with luncheon. Also House Surgeon, unmarried, for six months. Salary £30, with board and residence.
HOSPITAL FOR WOMEN, Soho-square, W.—Resident Medical Officer for six months. Salary at rate of £80 per annum.
HULL AND SCULCOATS DISPENSARY.—Resident Surgeon. Salary £220 per annum, with house, gas, and coals.
HULL ROYAL INFIRMARY.—Casualty House Surgeon for six months. Salary at rate of £80 per annum, with board and lodging.
INDIAN MEDICAL SERVICE.—Commissions in His Majesty's Indian Medical Service.
KING'S LANGLEY, LEAVESDEN ASYLUM, Herts. — Second Assistant Medical Officer, unmarried. Salary £210 per annum, with board, lodging, and washing.
LANCASTER COUNTY ASYLUM.—Assistant Medical Officer, unmarried. Salary £250 per annum, with board, apartments, washing, and attendance.
LEEDS GENERAL INFIRMARY.—House Physician for six months. Also House Surgeon. Each with board, residence, and laundry.
LEEDS INFECTIOUS DISEASES HOSPITALS AND SANATORIUM FOR TUBERCULOSIS.—Assistant Medical Officer, unmarried. Salary at rate of £130 per annum, with board, lodging, and washing.
LEEDS PUBLIC DISPENSARY.—Honorary Physician, Honorary Surgeon, Honorary Surgeon to the Eye Department, and Honorary Pathologist.
LEWES VICTORIA HOSPITAL.—Resident Medical Officer. Salary £120 per annum, with apartments, board, washing, attendance, &c.
LIVERPOOL, COUNTY ASYLUM, Rainhill, near Liverpool.—Assistant Medical Officer, unmarried. Salary £250 per annum, with apartments, board, attendance, and washing.
LIVERPOOL STANLEY HOSPITAL.—Two House Physicians. Salary £75 per annum each, with board, residence, and laundry.
LOWESTOFT HOSPITAL.—House Surgeon, unmarried. Salary at rate of £150 per annum, with board, residence, and laundry.
MAIDSTONE, KENT COUNTY ASYLUM.—Fourth Assistant Medical Officer, unmarried. Salary £200 per annum, with quarters, attendance, washing, &c.
MACCLESFIELD GENERAL INFIRMARY.—House Surgeon. Salary £125 per annum, with board and residence.
MANCHESTER, CORPORATION OF.—Assistant to the Medical Officer of Health. Salary £300 per annum.
MANCHESTER HOSPITAL FOR CONSUMPTION AND DISEASES OF THE THROAT AND CHEST.—Assistant Medical Officer and Pathologist. Salary £80 per annum.
MANCHESTER, MONSALL FEVER HOSPITAL.—First Medical Assistant and Third Medical Assistant. Salary £200 and £130 per annum respectively, with board, lodging, and washing.
MANCHESTER ROYAL INFIRMARY.—Medical Officer for Out-patients and Accidents for six months. Salary at rate of £100 per annum, with board and residence.
MILE END OLD TOWN, HAMLET OF.—Junior Assistant Medical Officer. Salary £140 per annum, with board, lodging, and washing.
MILLER GENERAL HOSPITAL FOR SOUTH-EAST LONDON, Greenwich-road, S.E.—Honorary Assistant Ophthalmic Surgeon. Also Honorary Physician.
NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, Queen-square, Bloomsbury.—Pathologist. Salary £250 per annum.
NEWCASTLE-UPON-TYNE CITY ASYLUM, Gosforth.—Junior Assistant Medical Officer, unmarried. Salary £160 per annum, with apartments, board, and laundry.
NORTHAMPTON GENERAL HOSPITAL.—Senior Resident Medical Officer, unmarried. Salary £120 per annum, with apartments, board, washing, and attendance.
NOTTINGHAM CITY EDUCATION COMMITTEE.—Third Medical Inspector. Salary £300 per annum.
NOTTINGHAM GENERAL DISPENSARY.—Resident Surgeon, unmarried. Salary £220 per annum, with apartments, attendance, light, and fuel.
OXFORD COUNTY ASYLUM, Littlemore, near Oxford.—Assistant Medical Officer. Salary £200 per annum, with apartments, board, and washing.
PERTH DISTRICT ASYLUM.—Assistant Physician. Salary £120 per annum, with board, lodging, and laundry.
PLYMOUTH, SOUTH DEVON AND EAST CORNWALL HOSPITAL.—House Physician for six months. Salary £90 per annum, with board, residence, and washing.
PORTSMOUTH ROYAL HOSPITAL.—House Physician for six months. Salary £80 per annum, with board, &c.
RICHMOND, SURREY, ROYAL HOSPITAL.—Assistant House Surgeon. Salary £70 per annum, with board, apartments, and washing.
ROCHESTER, ST. BARTHOLOMEW'S HOSPITAL.—Resident House Surgeon, unmarried. Salary at rate of £150 per annum, with board, residence, and laundry.
ROYAL EYE HOSPITAL, Southwark, S.E.—Senior and Junior House Surgeons for six months. Salary £70 and £50 per annum respectively, with board and residence. Also Clinical Assistants.
ROYAL FREE HOSPITAL, Gray's Inn-road, W.C.—Assistant Surgeon.
ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City-road, E.C.—Resident Medical Officer for six months. Salary at rate of £120 per annum, with board, lodging, and washing.
ST. GEORGE-IN-THE-EAST DISPENSARY FOR THE PREVENTION OF CONSUMPTION, 208, High-street, Shadwell, E.—Assistant Medical Officer. Salary £250 per annum.
ST. MARYLEBONE INFIRMARY, Rackham-street, Notting Hill, W.—Third Assistant Resident Medical Officer, unmarried, for six months. Salary £50, with apartments, rations, and washing.
ST. MARY'S HOSPITAL FOR WOMEN AND CHILDREN, Plaistow, E.—Junior Resident Medical Officer for six months. Salary at rate of £70 per annum, with residence, board, and laundry.
SHEFFIELD ROYAL HOSPITAL.—Assistant House Physician, unmarried. Salary £80 per annum, with board, lodging, and washing.
SHREWSBURY DISPENSARY.—Two Vacancies on Medical Staff.
SOUTHAMPTON, FREE EYE HOSPITAL.—House Surgeon. Salary £100 per annum, with board, lodging, and laundry.
TAUNTON, SOMERSET AND BATH ASYLUM, Cotford.—Assistant Medical Officer, unmarried. Salary £200 per annum, with apartments, board, washing, attendance, &c.

WAKEFIELD, WEST RIDING ASYLUM.—Assistant Medical Officer. Salary £200 per annum, with apartments, board, washing, and attendance.
WALSALL AND DISTRICT HOSPITAL.—Assistant House Surgeon. Salary £100 per annum, with board, residence, and laundry.
WARRINGTON, LANCASHIRE COUNTY ASYLUM, Winwick.—Pathologist and Assistant Medical Officer, unmarried. Salary £250 per annum, with board, apartments, attendance, and washing.
WARWICK COUNTY ASYLUM, Hatton, near Warwick.—Second Assistant Medical Officer, unmarried. Salary £200 per annum, with board, lodging, and laundry.
WEST AFRICAN MEDICAL STAFF.—Appointments. Salary £400 per annum. WEST INDIES.—TRINIDAD: Supernumerary Medical Officer. Salary £250 per annum and quarters. BRITISH HONDURAS: Two Assistant Medical Officers. Salary £350 per annum. LEEWARD ISLANDS: Supernumerary Medical Officer. Salary £250 per annum.
WEST HAM UNION SICK HOME, Forest-lane, Forest Gate.—Second Assistant Resident Medical Officer. Salary £140 per annum.
WESTERN OPHTHALMIC HOSPITAL, Marylebone-road, W.—Honorary Assistant Surgeon.
WIGAN, ROYAL ALBERT EDWARD INFIRMARY AND DISPENSARY.—Junior House Surgeon. Salary £100 per annum, with rations, apartments, and washing.
WINDSOR, KING EDWARD VII. HOSPITAL FOR WINDSOR, ETON, AND DISTRICT.—Assistant House Surgeon. Salary £76 per annum, with residence, board, laundry, and attendance.
WORCESTER GENERAL INFIRMARY.—Resident Medical Officer. Salary £150 per annum, with board, residence, and washing. Also Clinical Assistant and Dispenser. Salary £90 per annum, with board, residence, and washing.

THE Chief Inspector of Factories, Home Office, London, S.W., gives notice of vacancies as Certifying Surgeons under the Factory and Workshop Acts at Kidsgrove, in the county of Stafford; and at Redhill, in the county of Surrey.

THE Home Secretary gives notice of a vacancy for a Medical Referee under the Workmen's Compensation Act, 1906, for York, Thirsk, Helmsley, and Easingwold County Courts. Applications should be addressed to the Private Secretary, Home Office, S.W., and should reach him not later than Dec. 23rd.

*** The summary of vacant appointments, published weekly in this column, is, equally with other articles, the literary copyright of the Proprietors of THE LANCET.

# Births, Marriages, and Deaths.

## BIRTHS.

WHITE.—On Nov. 30th, at Elms-road, Clapham, S.W., to Dr. and Mrs. Joseph White (*née* Marie Hind), a son.
WIGHT.—On Nov. 26th, at Regency-square, Brighton, the wife of Edward Wight, B.A., M.R.C.S., L.R.C.P., of a son.

## MARRIAGES.

COWAN—EDGELL.—On Nov. 27th, at St. Cuthbert's Church, Thetford, Geoffrey Cowan, B.A., M.D., to Caroline Dorothea, youngest daughter of Mr. and Mrs. James Edgell, King's House, Thetford.
HORE—WATTS.—On Nov. 27th, at St. John's Church, Surrey-road, Bournemouth, Major Harry St. G. Standish Hore, R.A.M.C., to Mary Evadne, only daughter of the late Mr. Thomas Burgoyne Watts, of Bronwylfa, St. Asaph.

## DEATHS.

GODSON.—On Nov. 26th, at Montagu Mansions, W., Clement Godson, M.D., V.D., of Sharsted Court, Westgate-on-Sea, Knight of Grace of the Order of St. John of Jerusalem.
PRICE.—On Nov. 23th, at Priory-street, Carmarthen, suddenly, Rees Griffith Price, M.D., aged 62.
SIMSON.—On Nov. 28th, at Muttra, India, from acute nephritis, Kate Litton, beloved wife of Major Harold Simson, R.A.M.C., and beloved eldest daughter of Ernest and Kate Litton Clarke, of Chandos-street, Cavendish-square, aged 29. (By cable.)
WALCH.—On Nov. 27th, at Brighton, Charles Nash Crosby Walch, M.B., of "The Croft," Rustington, aged 44 years.

*N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

## METEOROLOGICAL READINGS.

*(Taken daily at 8.30 a.m. by Steward's Instruments.)*

THE LANCET Office, Dec. 3rd, 1913.

| Date. | Barometer reduced to Sea Level and 32° F. | Direction of Wind. | Rainfall. | Solar Radio in Vacuo. | Maximum Temp. Shade. | Min. Temp. | Wet Bulb. | Dry Bulb. | Remarks. |
|---|---|---|---|---|---|---|---|---|---|
| Nov. 27 | 30·42 | S.W. | ... | 57 | 54 | 41 | 41 | 42 | Overcast |
| ,, 28 | 30·38 | W. | ... | 75 | 57 | 42 | 51 | 52 | Cloudy |
| ,, 29 | 30·40 | S.W. | ... | 70 | 56 | 45 | 46 | 46 | Overcast |
| ,, 30 | 30·33 | S.W. | ... | 57 | 54 | 43 | 47 | 49 | Cloudy |
| Dec. 1 | 30·13 | W. | ... | 59 | 54 | 46 | 51 | 53 | Cloudy |
| ,, 2 | 30·10 | S.W. | 0·07 | 59 | 55 | 48 | 48 | 48 | Raining |
| ,, 3 | 29·82 | S.W. | ... | 61 | 55 | 48 | 49 | 51 | Overcast |

# Notes, Short Comments, and Answers to Correspondents.

## THE DIAGNOSIS AND TREATMENT OF SYPHILIS.

*To the Editor of* THE LANCET.

SIR,—I should be greatly obliged if you would kindly answer the following questions:—

1. Is it not true of syphilis that in women the primary sore and the swelling of the neighbouring glands are often either absent or not noticed by the patient?
2. Is it not true that the secondary eruptions, sore-throat, &c., may be very slight or absent, and yet the infection show itself by abortions and premature births?
3. Is it not true that men (but not commonly) have been known to suffer from tertiary syphilis, although they honestly deny having been aware of having suffered from a primary sore or rashes?
4. Is "606" treatment "often fatal"? Could you give me any idea as to the death-rate of the treatment?
5. Is a negative Wassermann (especially if the test is carried out 12 months or so after the patient has been thoroughly salivated and has had a partial mercurial treatment during the interval) worthy of serious consideration, although a positive result would be of great value in deciding diagnosis?
6. Does not a partial mercurial treatment often bring a pregnancy nearly to full term, and does not a thorough treatment often prove successful in producing a living child which in many cases can be reared successfully?
7. Is the above mercurial treatment, even if the mother is salivated early in the pregnancy, likely to cause the death of the fœtus at nearly full term?

I am, Sir, yours faithfully,
Nov. 15th, 1913. M.B., B.S.

*** 1. It is true that in women no history may be obtainable of the existence of a primary sore, and no enlargement of the inguinal glands may be noticed. 2. The secondary manifestations may be very slight, yet later miscarriages may occur. 3. Cases certainly occur in which men deny absolutely ever having had syphilis, though indubitable syphilitic manifestations may be present. 4. The mortality from "606" is not easy to determine. There have been deaths due to the use of this drug, but the percentage must be very small considering the very large number of cases in which it has been employed. Many surgeons have had long lists of cases of injection of "606" without a fatal case. 5. A negative Wassermann test is of little value, and it seems to be clear that the administration of mercury may render a Wassermann test negative in cases undoubtedly syphilitic. 6. A mercurial course is of great value in preventing abortion in syphilitic cases. 7. We know of no evidence that mercurial treatment is at all likely to cause the death of the fœtus.—ED. L.

## SMALL-POX IN FRENCH WEST AFRICA.

Captain C. Braithwaite Wallis, British Consul-General at Dakar, in a report to the Foreign Office on the affairs of French West Africa (comprising Senegal, French Guinea, Ivory Coast, French Sudan, and Mauritania), states that small-pox is unfortunately common amongst the natives in certain of the territories, and he praises the medical officers for the great energy they have shown in their endeavours to check the scourge. The medical staff consists of 43 military and 27 civil officers, and in the year 1911-12 they carried out, with some assistance from native dressers, 1,020,110 vaccinations. A long list is given of places at which epidemics of small-pox occurred during the year, but there appear to be no returns as to the number of cases or deaths.

## THE DOCTOR'S DAILY REGISTER.

THIS is a new form of visiting list, compiled by Fred. W. Menzies, A.S.A.A., and published by George Waterston and Sons, London and Edinburgh. It consists of a convenient loose-leaf leather case to hold a month's supply of sheets for attendances, ruled on the well-known plan, a month to the open page, with cash column; also blue sheets for panel patients, the cash column being replaced by a diagnosis column; a/c sheets for (*a*) receipts, (*b*) expenses, with an a/c column to aid in analysis of expenses; analytical motor expense sheets, consultation, obstetric, and vaccination sheets. The sheets are retained by screws that add nothing to the bulk of the back of the book, thus avoiding the awkward mechanical contrivances which lessen the value of most loose-leaf books for pocket use. The backs of the sheets are left blank for notes. The price is 10*s.* 6*d.* for the case with 12 monthly sets of sheets, annual refills costing 6*s.* 6*d.* It obviates the necessity for carrying

any sheets that the individual doctor may not need to use, or more than a month's supply at a time, thus reducing the entire thickness of the full book to a quarter of an inch, while the subsequent filing of the completed sheets constitutes them an original record. The paper is good and takes the ink well. The book is handy, compact, and serviceable.

*Mr. F. A. Windebank.*—A general answer is impossible; it depends on the nature of the liquid or the solid and on the state of the patient's digestion.

*Minor* should send his question through his medical attendant, whom we should be pleased to advise.

*Mr. R. Crawford (Sheffield).*—Our correspondent's explanation is ingenious but unsound.

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

# Medical Diary for the ensuing Week.

## SOCIETIES.

**ROYAL SOCIETY**, Burlington House, London, W.

THURSDAY.—Mr. A. Mallock: Intermittent Vision.—Mr. W. Wahl: The Relations between the Crystal-symmetry of the Simpler Organic Compounds and their Molecular Constitution—Part III. (communicated by Sir James Dewar).—Prof. G. G. Henderson and Mr. J. M. Heilbron: The Selective Absorption of Ketones (communicated by Dr. G. T. Beilby).—Mr. F. E. Smith: Absolute Measurements of a Resistance by a Method Based on that of Lorenz (communicated by Dr. R. T. Glazebrook).—Mr. A. N. Shaw: A Determination of the Electromotive Force of the Weston Normal Cell in Semiabsolute Volts. With a Preface by Prof. H. L. Callendar (communicated by Prof. H. L. Callendar).—Mr. F. E. Rowett: Elastic Hysteresis in Steel (communicated by Prof. B. Hopkinson).—Mr. F. W. Aston: A Simple Form of Micro-balance for Determining the Densities of Small Quantities of Gases (communicated by Sir J. J. Thomson).—Mr. T. R. Merton: On a Second Spectrum of Neon (communicated by Prof. G. D. Liveing and Sir James Dewar).

**ROYAL SOCIETY OF MEDICINE**, 1, Wimpole-street, W.

TUESDAY.

SECTION OF PSYCHIATRY (Hon. Secretaries—R. H. Cole, Bernard Hart), at the Royal Bethlem Hospital, St. George's Fields, S.E.: at 4.30 P.M.

*Cases:*

Dr. W. H. Stoddart: (1) Hypopituitarism; (2) (?) Anxiety Neurosis; (3 and 4) Dementia Paranoides; (5) Congenital Neurasthenia.

And other Cases.

SECTION OF SURGERY (H Secretaries—J. Murray, Raymond Johnson): at 5.30 P.M.

*Papers:*

Mr. Gilbert Kempe: Brachial Arteriovenous Aneurysm Successfully Treated by Vascular Suture.

Mr. V. Zachary Cope: The Early Diagnosis and Treatment of Ruptural Intestine.

Mr. H. Betham Robinson: Case of Endothelioma of the Breast.

THURSDAY.

SECTION OF SURGERY: SUB-SECTION OF ORTHOPÆDICS (Hon. Secretaries—A. S. Blundell Bankart, E. Rock Carling): at 4.30 P.M.

Mr. C. Max Page: An Apparatus for the Reduction of Some Deformities of the Joints, with Special Reference to the Knee.

Mr. R. C. Elmslie: Two Cases of Paralysis of the Serratus Magnus and Trapezius with Deformity of an Unusual Type.

SECTION OF NEUROLOGY (Hon. Secretaries—T. Grainger Stewart, H. Campbell Thomson): at 8 P.M.

Clinical Meeting.

*Demonstration of Cases:*

Dr. Turney: (1) Case of Cerebellar Tumour; (2) Functional Hemiplegic Contracture. Œdema of Hand and Face.

Dr. James Taylor: Friedreich's Ataxy with Unusual Commencement.

Dr. F. E. Batten: (1) Glioma of the Cerebellum; (2) Two Cases of Poliomyelitis with Unusual Symptoms.

Dr. James Collier: Two Cases of Thomsen's Disease.

Dr. Purves Stewart: Hysterical Brachial Monoplegia following an Electric Shock.

Dr. Farquhar Buzzard: (1) Diffuse Sclerodermia; (2) Acute Cerebellar Ataxia in an Adult.

Any other Members desiring to show cases are requested to send in their abstracts to Dr. Grainger Stewart, 54, Queen Anne-street, W., by Monday morning, Dec. 8th.

FRIDAY.

SECTION FOR THE STUDY OF DISEASE IN CHILDREN (Hon. Secretaries—F. Langmead, Philip Turner, William J. Midelton): at 4.30 P.M.

*Discussion:*

On Enlargement of the Spleen in Children (opened by Dr. Robert Hutchison and Sir John Bland-Sutton). Followed by Dr. G. A. Sutherland and others.

Fellows and Members wishing to take part in the discussion are requested to send in their names to Dr. Langmead.

CLINICAL SECTION (Hon. Secretaries—W. Essex Wynter, Thomas H. Kellock): at 8.30 P.M.

Dr. F. Parkes Weber: Case of Chronic Myelocytic Leukæmia treated by Benzol, &c.

Mr. Arthur Evans: Case of Suppression of Urine after Operation for Acute Appendicitis Cured by Double Nephrotomy.

Mr. Thomas H. Kellock: Three Cases of Malignant Disease after Treatment with Radium.

Dr. Frederic S. Palmer: Case of Congenital Heart Disease with Hemiplegia.

**MEDICAL SOCIETY OF LONDON**, 11, Chandos-street, Cavendish-square, W.

MONDAY.—8.30 P.M., Sir Anthony Bowlby, C.M.G., and Mr. D'Arcy Power: A Case of Aneurysm of the Arch of the Aorta treated by Colt's Method of Wiring, Death Four Months Later (with specimen).—Mr. T. H. Kellock: Circumcision—the Advantages of a Modified Operation.

**ROYAL SOCIETY OF ARTS**, John-street, Adelphi, W.C.

WEDNESDAY.—8 P.M., Mr. T. T. Baker: The Application of Electricity to Agriculture and Life.

**PLYMOUTH MEDICAL SOCIETY**, Athenæum Chambers, Athenæum-lane, Plymouth.

WEDNESDAY.—8.30 P.M., Paper:—Mr. R. Jaques: A State Medical Service.

**SOUTH-WEST LONDON MEDICAL SOCIETY**, Bolingbroke Hospital, Wandsworth Common, S.W.

WEDNESDAY.—9 P.M., Mr. P. W. G. Sargent: Some Common Affections of the Knee Joint.

**UNITED SERVICES MEDICAL SOCIETY**, Royal Army Medical College, Grosvenor-road, S.W.

THURSDAY.—5 P.M., Surgeon-General Sir Launcelotte Gubbins, K.C.B., M.V.O.: Jean Dominique, 1st Baron Larrey—his Life and Work.

**HARVEIAN SOCIETY OF LONDON**, Stafford Rooms, Titchborne-street, Edgware-road, W.

THURSDAY.—8.30 P.M., Paper:—Sir Ronald Ross, K.C.B.: The Study of Infections by Enumerative Methods (illustrated by lantern slides).

**HUNTERIAN SOCIETY**, St. Bartholomew's Hospital (Library), E.C.

WEDNESDAY.—9 P.M., A Series of Short Papers will be read.

**NORTH LONDON MEDICAL AND CHIRURGICAL SOCIETY**, Board Room of the Great Northern Central Hospital, Holloway-road, N.

THURSDAY.—9 P.M., Paper:—Dr. Constance Long: Treatment by Psychotherapy.

## LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

**MEDICAL GRADUATES' COLLEGE AND POLYCLINIC**, 22, Chenies-street, W.C.

MONDAY.—4 P.M., Dr. W. Fox: Clinique (Skin). 5.15 P.M., Lecture:—Mr. E. Davies-Colley: Acute Inflammation of the Long Bones.

TUESDAY.—4 P.M., Dr. R. H. Miller: Clinique (Medical). 5.15 P.M., Lecture:—Mr. J. F. O'Malley: The Hæmorrhage of Tonsil and Adenoid Operations.

WEDNESDAY.—4 P.M., Mr. G. Taylor: Clinique (Surgical). 5.15 P.M., Lecture:—Mr. C. A. Pannett: Obstruction in the Small Intestine.

THURSDAY.—4 P.M., Mr. J. K. Murphy: Clinique (Surgical). 5.15 P.M., Lecture:—Dr. E. C. Hort: Gastric Ulcer and Micro-organism.

FRIDAY.—4 P.M., Mr. J. G. French: Clinique (Ear, Nose, and Throat).

**POST-GRADUATE COLLEGE**, West London Hospital, Hammersmith-road, W.

MONDAY.—10 A.M., Dr. Simson: Diseases of Women. 10.30 A.M., Medical Registrar: Demonstration of Cases in Wards. 12 noon, Dr. Bernstein: Pathological Demonstration. 2 P.M., Medical and Surgical Clinics. X Rays. Mr. Armour: Operations. 2.30 P.M., Mr. Dunn: Diseases of the Eye. 5 P.M., Lecture:—Dr. Pernet: Extra-genital Chancres.

TUESDAY.—10 A.M., Dr. Robinson: Gynæcological Operations. 10.30 A.M., Surgical Registrar: Demonstration of Cases in Wards. 12 noon, Mr. T. Gray: Demonstration of Fractures, &c. 2 P.M., Medical and Surgical Clinics. X Rays. Mr. Baldwin: Operations. Dr. Davis: Diseases of the Throat, Nose, and Ear. Dr. Pernet: Diseases of the Skin. 5 P.M., Lecture:—Dr. Pernet: Syphilitic Headache.

WEDNESDAY.—10 A.M., Dr. Saunders: Diseases of Children. Dr. Davis: Operations of the Throat, Nose, and Ear. 11 A.M., Mr. Souttar: Demonstration of Minor Operations. 12 noon, Lecture:—Mr. Souttar: Abdominal Diagnosis. 2 P.M., Medical and Surgical Clinics. X Rays. Mr. Pardoe: Operations. Mr. B. Harman: Diseases of the Eye. Dr. Simson: Diseases of Women. 5 P.M., Lecture:—Dr. Pernet: Secondary Syphilitic Rashes.

THURSDAY.—10.30 A.M., Dr. Simson: Gynæcological Demonstration. 12.15 P.M., Lecture:—Dr. G. Stewart: Neurological Cases. 2 P.M., Medical and Surgical Clinics. X Rays. Mr. Armour: Operations. 2.30 P.M., Mr. Dunn: Diseases of the Eye. 5 P.M., Lecture:—Mr. Souttar: Injuries to Nerves in General Practice.

FRIDAY.—10 A.M., Dr. Robinson: Gynæcological Operations. 10.30 A.M., Lecture:—Dr. Owen: Practical Medicine. 12.15 P.M., Lecture:—Dr. Bernstein: Clinical Pathology. 2 P.M., Medical and Surgical Clinics. X Rays. Mr. Baldwin: Operations. Dr. Davis: Diseases of the Throat, Nose, and Ear. Dr. Pernet: Diseases of the Skin. 5 P.M., Lecture:—Mr. Souttar: Injuries to Nerves in General Practice.

SATURDAY.—10 A.M., Dr. Saunders: Diseases of Children. Dr. Davis: Operations of the Throat, Nose, and Ear. Mr. B. Harman: Diseases of the Eye. 12 noon, Lecture:—Mr. Souttar: Surgical Anatomy of the Abdomen. 2 P.M., Medical and Surgical Clinics. X Rays. Mr. Pardoe: Operations.

**LONDON SCHOOL OF CLINICAL MEDICINE**, Dreadnought Hospital, Greenwich.

MONDAY.—Out-patient Demonstrations:—10 A.M. Dr. Singer: Medical. Mr. H. Curtis: Surgical. 12 noon, Mr. G. N. Biggs: Throat, Nose, and Ear.—2.15 P.M., Mr. W. Turner: Surgery. 3 P.M., Mr. W. Turner: Operations. 3.15 P.M., Sir Dyce Duckworth: Medicine. 4.15 P.M., Mr. R. Lake: Ear and Throat.

TUESDAY.—Out-patient Demonstrations:—10 A.M., Dr. G. Holmes: Medical. Mr. Cole: Surgical. 12 noon, Dr. H. MacCormac: Skin.—2 P.M., Mr. L. McGavin: Operations. 2.15 P.M., Mr. R. Carling: Surgery. 3.15 P.M., Dr. G. Rankin: Medicine. 4.30 P.M., Special Lecture:—Dr. G. Holmes': Diseases of the Ductless Glands (illustrated by lantern slides).

WEDNESDAY.—Out-patient Demonstrations: 10 A.M., Dr. F. Langmead: Medical. Mr. Cecil Rowntree: Surgical. 11 A.M., Mr. R. B. Bickerton: Eye.—2 P.M., Mr. L. V. Cargill or Mr. Choyce: Operations. 2.15 P.M., Dr. F. Taylor: Medicine. 3.15 P.M., Mr. Cargill: Eye Clinique. 4.30 P.M., Mr. C. C. Choyce: Surgery. 2.15 P.M., Special Lecture:—Dr. F. Taylor: Rigors.

THURSDAY.—Out-patient Demonstrations:—10 A.M., Dr. Singer: Medical. Mr. H. Curtis: Surgical. 12 noon, Mr. G. N. Biggs: Throat, Nose, and Ear.—2 P.M., Mr. R. Carling or Mr. W. Turner: Operations. Dr. A. Davies: Pathological Demonstration. 3.15 P.M., Dr. R. Wells: Medicine. 4.30 P.M., Special Lecture:—Prof. R. T. Hewlett: Intestinal and Urinary Antiseptics.

FRIDAY.—Out-patient Demonstrations:—10 A.M., Dr. G. Holmes: Medical. Mr. Cole: Surgical. 12 noon, Dr. H. MacCormac: Skin.—2 P.M., Mr. L. McGavin: Operations. 2.15 P.M., Sir John Rose Bradford: Medicine 3.15 P.M., Mr. L. McGavin: Surgery. 2.15 P.M., Sir John R. Bradford: Angina.

SATURDAY.—Out-patient Demonstrations: 10 A.M., Dr. F. Langmead: Medical. Mr. Cecil Rowntree: Surgical. 11 A.M., Mr. R. B. Bickerton: Eye.—10 A.M., Col. Barry: Radiography.

**NORTH-EAST LONDON POST-GRADUATE COLLEGE**, Prince of Wales's General Hospital, Tottenham, N.

MONDAY.—Clinics:—10.30 A.M., Surgical Out-patient (Mr. R. Gillespie). 2.30 P.M., Medical Out-patient (Dr. T. R. Whipham); Nose, Throat, and Ear (Mr. H. D. Gillies). 3 P.M., Clinical Pathology and Pathological Demonstration (Dr. W. H. Duncan).

TUESDAY.—2 P.M., Anæsthetics in General Practice (Dr. Hadfield). 2.30 P.M., Operations. Clinics:—Medical Out-patient (Dr. A. G. Auld); Surgical (Mr. Howell Evans); Gynæcological (Dr. A. E. Giles). 3 P.M., Selected Cases illustrating Hernia (Mr. Gillespie). 4.30 P.M., Examination of the Bladder by Modern Methods (Mr. Howell Evans).

WEDNESDAY.—Clinics:—2 P.M., Throat Operations (Mr. Gillies). 2.30 P.M., Children's Out-patient (Dr. T. R. Whipham); Skin (Dr. G. N. Meachen); Eye (Mr. R. P. Brooks). 3 P.M., X Rays (Mr. W. Steuart); Clinical Pathology and Pathological Demonstration (Dr. W. H. Duncan). 5.30 P.M., Eye Operations (Mr. Brooks).

THURSDAY.—2.30 P.M., Gynæcological Operations (Dr. A. E. Giles). Clinics:—Medical Out-patient (Dr. A. J. Whiting); Surgical (Mr. Carson). 3 P.M., Medical In-patient (Dr. G. P. Chappel).

FRIDAY.—2.30 P.M., Operations. Clinics:—Medical Out-patient (Dr. A. G. Auld); Surgical (Mr. R. Gillespie); Eye (Mr. R. P. Brooks). 3 P.M., Medical In-patient (Dr. R. M. Leslie); Clinical Pathology and Pathological Demonstration (Dr. W. H. Duncan).

**LONDON HOSPITAL MEDICAL COLLEGE** (UNIVERSITY OF LONDON), Clinical Theatre, London Hospital, Mile End-road, E.

Course of Lectures on the Neuroses and Psychoses of Children:—

TUESDAY.—2 P.M., Dr. F. Warner: Study of Modes of Brain Action.

**HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST**, Brompton, S.W.

WEDNESDAY.—4.30 P.M., Lecture:—Dr. R. A. Young: Interlobar and Encysted Empyemata.

**NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC**, Queen-square, Bloomsbury, W.C.

TUESDAY.—3.30 P.M., Clinical Lecture:—Dr. K. Wilson: Pellagra.

FRIDAY.—3.30 P.M., Clinical Lecture:—Dr. K. Wilson: Apraxia in Relation to Aphasia.

**THE THROAT HOSPITAL**, Golden-square, W.

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